BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
	)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338

MOTION FOR LEAVE TO ACCEPT AS TIMELY FILED THE COMMENTS OF THE ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES; CBEYOND COMMUNICATIONS; BLACKFOOT COMMUNICATIONS, INC.; U.S. TELEPACIFIC CORP. d/b/a TELEPACIFIC COMMUNICATIONS; ESCHELON TELECOM, INC.; CHOICE ONE COMMUNICATIONS INC.; BIDDEFORD INTERNET CORPORATION d/b/a GREAT WORKS INTERNET; PAC-WEST TELECOMM, INC.; US LEC CORP.; LIGHTSHIP TELECOM; GLOBALCOM, INC.; MEGAGATE BROADBAND, INC.; BROADRIVER COMMUNICATION CORPORATION; NETWORK TELEPHONE CORPORATION; SUPRA TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC.; CAVALIER TELEPHONE, LLC; NEW EDGE NETWORK, INC.; CONVERSENT COMMUNICATIONS, LLC; FDN COMMUNICATIONS; segTEL, INC.

The Association for Local Telecommunications Services and the above referenced companies ("ALTS") hereby respectfully request that the Commission accept the comments of ALTS, in the above-referenced proceeding, one business day out of time. Due to unforeseen circumstances beyond the control of ALTS, it was unable to obtain the signature of Robert J. Shanahan, Conversent Communications, LLC in time for filing a declaration in his name along with ALTS' comments. A redacted version of this declaration was to be filed as appendix H to ALTS' comments. Aside from this omission, on October 4, 2004, all portions of ALTS' filing were submitted on time.

As a result of these unforeseen difficulties, the attached comments of ALTS are filed one day late. Unlike the iteration of the comments filed yesterday, this filing includes the Shanahan declaration and is therefore complete. These comments will be filed electronically less than one business day after the original comments were due. Redacted and non-redacted versions of the declaration will be filed with the Secretary and Wireline Competition Bureau staff the same day. Therefore, ALTS submits that no interested party will be prejudiced in any way by the grant of this motion.

For the forgoing reasons, ALTS respectfully requests that this Motion for Leave to Accept Comments Out of Time be granted.

Respectfully submitted,

/s/

Thomas Jones
Jonathan Lechter*

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ATTORNEYS FOR THE ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES ET. AL..

*Admitted in Maryland only

October 5, 2004.

BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
	)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338

COMMENTS OF THE ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES; CBEYOND COMMUNICATIONS; BLACKFOOT COMMUNICATIONS, INC.; U.S. TELEPACIFIC CORP. d/b/a TELEPACIFIC COMMUNICATIONS; ESCHELON TELECOM, INC.; CHOICE ONE COMMUNICATIONS INC.; BIDDEFORD INTERNET CORPORATION d/b/a GREAT WORKS INTERNET; PAC-WEST TELECOMM, INC.; US LEC CORP.; LIGHTSHIP TELECOM; GLOBALCOM, INC.; MEGAGATE BROADBAND, INC.; BROADRIVER COMMUNICATION CORPORATION; NETWORK TELEPHONE CORPORATION; SUPRA TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC.; CAVALIER TELEPHONE, LLC; NEW EDGE NETWORK, INC.; CONVERSENT COMMUNICATIONS, LLC; FDN COMMUNICATIONS; segTEL, INC.

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ATTORNEYS FOR THE ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES, ET. AL.

October 4, 2004

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BEFORE THE

Federal Communications Commission

WASHINGTON, D.C.

In the Matter of	)	
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Unbundled Access to Network Elements	)	WC Docket No. 04-313
	)	
Review of the Section 251 Unbundling	)	CC Docket No. 01-338
Obligations of Incumbent Local Exchange	)	
Carriers	)	

COMMENTS OF THE ASSOCIATION FOR LOCAL TELECOMMUNICATIONS SERVICES; CBEYOND COMMUNICATIONS; BLACKFOOT COMMUNICATIONS, INC.; U.S. TELEPACIFIC CORP. d/b/a TELEPACIFIC COMMUNICATIONS; ESCHELON TELECOM, INC.; CHOICE ONE COMMUNICATIONS INC.; BIDDEFORD INTERNET CORPORATION d/b/a GREAT WORKS INTERNET; PAC-WEST TELECOMM, INC.; US LEC CORP.; LIGHTSHIP TELECOM; GLOBALCOM, INC.; MEGAGATE BROADBAND, INC.; BROADRIVER COMMUNICATION CORPORATION; NETWORK TELEPHONE CORPORATION; SUPRA TELECOMMUNICATIONS AND INFORMATION SYSTEMS, INC.; CAVALIER TELEPHONE, LLC; NEW EDGE NETWORK, INC.; CONVERSENT COMMUNICATIONS, LLC; FDN COMMUNICATIONS; segTEL, INC.

The Association for Local Telecommunications Services ("ALTS"), along with the member companies listed above, hereby files its comments in response to the Notice of Proposed Rulemaking in the above-referenced proceeding.[1]

I. INTRODUCTION AND SUMMARY

This proceeding presents the Commission with an opportunity to set the future course of competition policy for the nation at a time of unprecedented uncertainty in the telecommunications industry. The Commission's new unbundling regime will determine the

[1] *See Unbundled Access to Network Elements, Review of Section 251 Unbundling Obligations of Local Exchange Carriers*, Order and Notice of Proposed Rulemaking, 19 FCC Rcd 16783 (2004).

success or failure of the Telecommunications Act of 1996, and will either facilitate or destroy the competitive telecommunications industry. Incumbent carriers are before the Commission arguing that no unbundling rules whatsoever are justified, not even for bottleneck transmission facilities. Competitive carriers are before the Commission suggesting a measured interpretation of the 1996 Act, one that promotes facilities-based competition by mandating cost-based access to bottleneck facilities only where true impairment exists. Which pathway to new rules the Commission chooses to follow will determine the course of the telecommunications industry, the most vital sector of the nation's technology economy.

The Commission should view these comments from ALTS and its member companies as a uniquely legitimate and reasonable portrayal of the unbundling regime necessary to promote facilities-based competition. ALTS members are not opportunistic enterprises that view the 1996 Act as a vehicle to support uneconomic entry and competition without making the necessary investment in competitive networks. To the contrary, ALTS members are the poster children of the 1996 Act, representing collectively billions of dollars in investments in telecommunications networks. Where facilities and equipment can be deployed in a rational economic manner, ALTS members have done so. Where competition requires investment in innovative equipment, ALTS members have made the investment. But where facilities cannot be duplicated, these innovative, entrepreneurial companies require access to the bottleneck monopoly facilities that the 1996 Act makes available.

The D.C. Circuit's decision in *USTA II* presents the Commission with a tremendous opportunity to build a new national framework for local competition. As described in these comments, ALTS believes that national, minimum unbundling rules remain essential to the development of facilities-based local competition. To safeguard the viability of unbundled

network elements ("UNEs") as a method of entry, the Commission must reject any proposal that would allow ILECs to dismantle these rules. Instead, the Commission must adopt a certain and effective mechanism for adding and removing UNEs from its minimum national unbundling requirements. Per the D.C. Circuit's guidance, the Commission should give substance to the "impair" standard by adopting a sustainable, legally and economically rational test for determining which facilities are true bottlenecks that must be unbundled.

ALTS proposes that test in these comments. Applying the ALTS test, the Commission must look to non-ILEC sources for alternative elements, if and where they exist, and must determine whether such alternatives are reasonable substitutes by considering multiple factors, including functionality, quality of service, scope of availability, and delay to market. If, based on these factors, a requesting carrier's ability to compete is impaired, unbundling of the ILEC network element must be required. Because ALTS members have proven a willingness to deploy their own networks where it is possible to do so, ALTS is the most legitimate source for a reasonable analysis of where true impairment exists and where it does not. Put another way, ALTS members have proven their legitimacy to the Commission as the voice of facilities-based competition, and thus are properly viewed as the model of competitive entry that this Commission should seek to promote.

In the face of repeated ILEC promises that they will build advanced broadband networks if relieved of unbundling obligations, the Commission should be suspicious of such ILEC attempts to manipulate policy makers by promising to provide desired services if they are permitted to retain their monopoly. The Commission has misconstrued Section 706 of the 1996 Act as a one-way street, mandating massive reductions in bottleneck loop unbundling via a statutory provision clearly designed to promote competition, not monopoly. Congress required

that broadband goals be achieved through unbundling and the other pro-competitive provisions of the Act. The Commission should not interpret Section 706 as authorizing the continued evisceration of the pro-competitive provisions of the Commission's statutory mandate.

As set out in greater detail below, the Commission's interpretation of the statutory impairment test in the *Triennial Review Order* provides for a satisfactory and lawful implementation of ILEC unbundling obligations under Section 251(c)(3). There is no reason for the Commission to radically change those interpretations now. To the extent the Commission is required to implement a granular, easily administered means of operationalizing that impairment test, ALTS proposes a means of doing so.

As set forth below, the foregoing considerations warrant the following rulings in this proceeding:

- Special access should be deemed irrelevant to the application of the impairment test to competitors seeking to provide competitive local, access and broadband service. This is so because (1) the language and structure of the act demonstrate that Congress intended that such competitors would be able to rely on UNEs where multiple non-ILEC sources of supply are unavailable; (2) in contrast to CMRS, reliance on special access has not allowed CLECs to "flourish;" (3) there are no regulatory constraints on the incumbents' abuse of market power in the provision of special access *except for the availability of UNEs;* once that constraint is eliminated, no competitor would be able to rely on special access as a means of market entry; and (4) even if there were isolated markets in which reliance on special access in the absence of UNEs were possible, it would be administratively impossible for the Commission to identify those markets.

- DS0, DS1, DS3, dark fiber, network interface devices, subloops and in-building wiring loops should be subject to a national finding of impairment. If the Commission decides that it must try to identify the locations in which non-ILEC suppliers of DS3 or dark fiber loops exist, it should rely on self-reporting by competitors to identify those customer locations at which the *Triennial Review Order* triggers are met. The Commission should also reinstate line sharing.

- DS1 transport should be subject to a national finding of impairment, and DS3 and dark fiber transport should be subject to a three-tiered test that relies on business access lines served by a wire center as estimated by PNR Associates in

combination with the impairment triggers from the *Triennial Review Order* to determine impairment.

- UNE combinations, including loop-transport combinations, should continue to be available. In fact, DS1 EELs should be subject to a nationwide finding of impairment.

- Entrance facilities should be available as unbundled network elements until a competitor reaches a volume of capacity such that self-deployment is deemed efficient. After such scale has been achieved, the competitor should no longer be eligible for unbundled entrance facilities.

- Unbundled switching should be available until a competitor accumulates two DS3s worth of traffic in a particular market.

- Operations Support Systems must continue to be available as a UNE on a nationwide basis.

II. THE IMPAIRMENT STANDARD ADOPTED IN THE *TRIENNIAL REVIEW ORDER* IS FUNDAMENTALLY SOUND AND SHOULD BE READOPTED

In the *Triennial Review Order*, the Commission held that a requesting carrier is impaired without access to a network element if lack of access "poses an entry barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic."[2] To determine whether "the potential revenues from entering a market exceed the costs of entry," the Commission examined the relevant entry barriers and "marketplace evidence" as to the circumstances in which competitors have entered without relying on UNEs. *Id.*

The Commission focused on five types of entry barriers in its impairment analysis: (1) scale economies, especially when combined with significant sunk costs and first-mover

[2] *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand, 18 FCC Rcd 16978, ¶ 84 (2003) ("*Triennial Review Order*"), *vacated in part, United States Telecomm. Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) ("*USTA II*").

advantages (*see id*. ¶ 87); (2) sunk costs (especially when combined with scale economies), which the Commission found "can pose a formidable barrier to entry" because they "increase risk," increase an entrant's "cost of failure," and create incumbent LEC opportunities for strategic behavior. (*see id.* ¶ 88); (3) first mover advantages;[3] (4) absolute cost advantages (*see id.* ¶ 90); and (5) barriers within the primary or sole control of the incumbent, such as operational barriers (*see id*. ¶ 91). The Commission considered these entry barriers in light of the revenue opportunities in a particular market to determine whether the barriers preclude entry by multiple non-incumbent LEC suppliers. *See id*. ¶ 100.

In conducting this analysis, the Commission held that "actual marketplace evidence is the most persuasive and useful kind of evidence," because it demonstrates whether "new entrants, as a practical matter, have surmounted barriers to entry in the relevant market." *Id.* ¶ 93 (emphasis omitted). If the marketplace evidence shows that new entrants have deployed a certain type of facility, the Commission next examined "how extensively carriers have been able to deploy such alternatives, to serve what extent of the market, and how mature and stable the market is." *Id.* ¶ 94. The Commission expressly held that some evidence of deployment by non-incumbent LECs of a type of facility is not dispositive evidence of non-impairment throughout the market. *See id*. Finally, the Commission held that the extent to which intermodal competition is relevant to the impairment analysis depends on the extent to which the intermodal services in question are "comparable in cost, quality, and maturity to incumbent LEC services," and on whether the

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[3] The Commission listed numerous examples of first mover advantages that pose entry barriers, including "preferential access to buildings, access to rights-of-way, the higher risk of new entrants' failure (often exacerbated by high sunk costs), the fact that the incumbent has substantial sunk capacity, operational difficulties faced by an entrant that have already been worked out by the incumbent LEC when it built out its network as a monopolist, consumers' reluctance to switch carriers and advertising and brand name preference." *See id.* ¶ 89.

intermodal alternatives actually contribute to the creation of a wholesale market or provide evidence that self-deployment by other competitors is possible." *See id*. ¶¶ 97-98.

The D.C. Circuit found that this analytical framework is fundamentally sound, because the Commission's consideration of the entry barriers discussed above "plausibly connects factors to consider the impairment inquiry to natural monopoly characteristics." *USTA II* at 571. The court also found that the Commission's treatment of intermodal competitors was facially reasonable. *See id.* at 572-573.

The court had only two criticisms of the Commission's impairment analysis, both of which require only modest adjustments to the approach adopted in the *Triennial Review Order*. The court understandably found that in concluding that there is impairment where the relevant entry barriers make entry "uneconomic," the Commission failed to specify "uneconomic by whom." *Id.* at 572. The most sensible response to this criticism is that impairment must be found where (1) entry is uneconomic (that is, it poses an entry barrier) for a reasonably efficient competitor and (2) the effect may be to substantially lessen competition in the retail services that utilize the network element.[4]

This approach is consistent with sound policy because the focus on a reasonably efficient entrant precludes any inferences in the impairment analysis from inefficient entry. Moreover, the focus on harm to the downstream retail market is consistent with the D.C. Circuit's insistence

[4] See John. W. Mayo et. al. Mayo/MiCRA/Bates White Economic Impairment Analysis (Oct. 2004) ("*Bates-White* ") filed as an attachment to ex parte of John W. Mayo, Georgetown University, to Marlene H. Dortch, Secretary, FCC at 29 (filed Oct. 4, 2004).

that the impairment analysis focus on consumer welfare.[5] In addition, this approach to the impairment standard addresses the court's concerns regarding implicit subsidies, because the focus is on whether an efficient entrant must rely on UNEs, not whether any competitor can use UNEs in any market (including one in which prices are purportedly artificially high -- if such a market exists at all -- due to implicit subsidies). In this manner, the standard ties availability of UNEs to the goals of the Act, efficient facilities-based competition, even in markets where implicit subsidies exist.

III. SPECIAL ACCESS SHOULD BE DEEMED IRRELEVANT TO THE IMPAIRMENT ANALYSIS FOR INPUTS NEEDED TO PROVIDE WIRELINE LOCAL, ACCESS, AND BROADBAND SERVICES.

In *USTA II*, the D.C. Circuit held that in the *Triennial Review Order* the FCC did not adequately explain why it considered the availability of special access to be irrelevant to determining whether CMRS carriers are impaired in the absence of unbundled transport. The court observed that it was not obvious that impairment exists where exclusive reliance on special access has allowed CMRS competition "not only to survive but to flourish" and where reliance on special access has "obviously not made competitive entry uneconomic." *USTA II* at 576-77.

Notwithstanding this observation, the court essentially invited the Commission to proffer an explanation on remand as to why special access is in fact completely irrelevant to the impairment analysis. The court suggested, for example, that the incumbent LECs' incentive to set tariff prices as high as possible combined with the administrative difficulties of overseeing tariffs "might in principle support a blanket rule treating the availability of ILEC tariffed service

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[5] *Cf. United States Telecomm. Ass'n v. FCC*, 290 F.3d 415, 429-30 (D.C. Cir. 2002) ("*USTA I*") (overturning line sharing order based on intermodal competition in the downstream retail market for mass market broadband services).

as irrelevant to impairment." *Id.* at 576. In fact, the court's discussion of special access offers three obvious and independently dispositive bases for adopting such a "blanket rule." Special access cannot be deemed relevant to the impairment analysis because (1) the availability of special access cannot possibly be said to have allowed competition in the local exchange and exchange access markets to "flourish;" (2) fundamental differences between CMRS and competitors in the local, access and broadband markets preclude any inference that competition among CMRS providers relying on special access means that the same outcome is possible in the markets in which CLECs compete; (3) there is no existing means for the Commission to control the consequences of the incumbents' incentives and opportunities to raise the price and degrade the service quality of special access after the constraining influence of UNEs is eliminated; and (4) even if there were some markets in which competitors could rely on special access after the elimination of UNEs, it would be administratively impossible to identify those markets (and in any event, Congress designed the 1996 Act so that such a fruitless undertaking would not be required).

A. The Terms And Structure Of The 1996 Act Reflect Congress' Intent That CLECs Obtain Essential Inputs Such As Loops And Transport As UNEs Rather Than As Special Access When Providing Local, Access And Broadband Wireline Services.

Before reaching the bases for a blanket rule against consideration of special access suggested by the *USTA II* court, it is important to emphasize a point that the court did not address, namely, that Congress itself ruled out consideration of special access as part of the impairment analysis. The language and structure of the 1996 Act make clear that Congress intended that entrants would be able to rely on network elements when providing local, access, and other wireline services (such as broadband) the incumbents offer on an integrated basis and

for which there was (and is) an obvious threat of price squeezes and other anticompetitive behavior.

By the time Congress adopted the Telecommunications Act of 1996, incumbent LECs had been providing special access services to long distance carriers and large business customers for more than a decade. The regulatory framework for providing loops (referred to as "channel terminations" in the special access context) and interoffice transport pursuant to interstate special access tariffs was stable and well-understood. Congress could theoretically have required needed adjustments to these tariffed offerings and established them as the vehicle for CLECs to obtain loops and transport to compete in the newly-opened local exchange market. But it did not. Instead, it established a legal obligation for incumbent LECs to provide competitors with UNEs at prices "based on cost" and on "nondiscriminatory" terms and conditions. *See* 47 U.S.C. §§ 252(d), 251(c)(3).

It is clear that Congress deemed special access to be an adequate mode of entry, at least initially, for markets in which incumbent LECs' incentives and opportunities for anticompetitive behavior were diminished when compared to the local and access services markets. To begin with, the 1996 Act only refers to special access in the context of competitive long distance and information services. For example, Section 251(g) preserves equal access and nondiscrimination regulations applicable to "exchange access, information access and exchange services" purchased by "interexchange carriers and information service providers." *Id.* at § 251(g). Similarly, Section 272(e), which establishes structural separation for BOC in-region interLATA telecommunications and information services, imposes nondiscrimination obligations on the provision of "telephone exchange service" and "exchange access" service. *Id*. at § 272(e). These provisions demonstrate that Congress expected that competitive providers' stand-alone

interexchange service would rely (again, at least initially) on "exchange access" (including, of course, special access) and that providers of stand-alone information services would continue to rely on the special access, telephone exchange and "information access" arrangements to obtain access to incumbent LEC networks.[6] Importantly, however, Congress specified that BOCs would not compete at all against such offerings until they made network elements available as a condition of interLATA entry, and, once they did so, they would only compete in the in-region interLATA market via services offered through Section 272 separate affiliates. These precautions were obviously intended to address the threat of price and non-price discrimination.[7] Similarly, independent ILECs were already subject to the separate affiliate requirements established in the *Competitive Carrier* proceeding.[8]

In contrast, Congress chose not to require that incumbent LECs establish separate retail affiliates for their local operations. As described below, without even the constraints of structural separation, incumbent LECs have essentially limitless opportunities to engage in price and non-price discrimination against their competitors. To address this problem (and doubtless to prevent this type of behavior when needed in markets subject to structural separation as well), Congress required that UNEs be offered at cost-based prices and on "nondiscriminatory" terms

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[6] Indeed, Congress incorporated the Commission's regulatory distinction between information services and telecommunications services in order to delineate which services can be provided via UNEs and other inputs under Section 251(c). *See, e.g.*, 47 U.S.C. § 251(c)(3) (limiting the duty to provide UNEs to "any requesting telecommunications carrier").

[7] The fact that the separate affiliate requirements sunset by operation of the statute merely reflects Congress' predictive (though, it turns out, inaccurate) judgment that competition could develop enough in the future such that the separate affiliates would no longer be necessary and that, in all events, the FCC would need to expressly determine that their continued existence is justified before deciding to keep them in place (in fact, however, the FCC has simply allowed the affiliates to sunset without any analysis as to whether it is sound policy to do so).

[8] *See Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, Fifth Report and Order, 98 F.C.C.2d 1191, ¶ 9 (1984) ("*Competitive Carrier*").

and conditions instead of simply prohibiting "unjust or unreasonable discrimination" as is the case under the Section 202 language governing special access. See 47 U.S.C. §§ 252(d)(1); 251(c)(3).

Congress clearly intended that UNEs would be the means by which competitors competing against at least the incumbent LECs' integrated service offerings (such as local and access service and, later, broadband) would obtain essential inputs of production. For example, the competitive checklist in Section 271 requires compliance with Section 251(c) unbundling *and does not even address special access*.[9] The goal of Section 271 is of course to ensure that the market for local exchange and exchange access is open as a precondition for interLATA entry. By establishing compliance with the unbundling requirements as a precondition to in-region interLATA entry, and by omitting any such condition with regard to special access, Congress signaled that UNEs would be the means by which CLECs would compete in the previously closed local market. The statutory provisions governing collocation further confirm this interpretation. Section 251(c)(6) makes physical collocation, a crucial input for competitors, only available for purposes of obtaining "access" to UNEs and "interconnection" for purposes of exchanging local exchange and exchange access traffic. *See id.* § 251(c)(6).

It is also significant that, while Congress gave the FCC broad authority to establish the overall framework for obtaining access to UNEs regardless of the jurisdictional nature of the

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[9] *See Application by SBC Communications Inc., Southwestern Bell Telephone Company, And Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Communications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, Memorandum Opinion and Order, 15 FCC Rcd 18354, ¶ 335 (2000) (holding that the competitive checklist does not address special access).

traffic traversing those facilities,[10] it did not bother to address the jurisdictional limitations of special access in the 1996 Act. Under current law, a special access circuit qualifies as interstate only if more than 10 percent of the traffic traversing the facility is interstate. *See* 47 C.F.R. § 36.154(a). It may be that most local service lines meet this requirement, but this is surely not the case with regard to all such end user connections. The repeated monitoring of traffic flows and the uncertainty of compliance due to end user calling patterns make interstate special access an inappropriate means of reliable, widespread entry. Nor would reliance on state special access offerings be either efficient (creating a patchwork of inconsistent state requirements) or consistent with the intent of Congress to establish a national framework for local competition.

Thus, the language and structure of the 1996 Act leave little room for doubt that Congress believed that competitors must be able to obtain inputs as cost-based UNEs provided on a nondiscriminatory basis *at the very least* where they compete with incumbent LEC integrated local, access and broadband service offerings. This is of course not an interpretation of the Act that either the Commission or the D.C. Circuit addressed in the past, but it is should be deemed conclusively to support, or at the very least, provide powerful support in favor of, a blanket rule against consideration of the availability of special access in the impairment analysis in the context of local, access and broadband service offerings.

B. Reliance On Special Access Has Not Allowed Competition In The Local, Access And Broadband Markets To "Flourish."

The D.C. Circuit questioned how CMRS providers could be impaired without UNEs in a market where reliance on special access has allowed CMRS providers "not only to survive but to

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[10] *See AT&T Corp. v. Iowa Utils. Board*, 525 U.S. 366, 380-383 (1999).

flourish." Whatever may be the state of competition in the CMRS market, it cannot be said that, notwithstanding reliance on special access, competitors or competition in the local, access and broadband markets[11] have been able to "flourish."

In fact competitors and competition in this sector have been barely able "to survive." As explained by Bates-White, the CLEC sector has been characterized by a very high number of bankruptcies (53 by Bates-White's count). *See Bates White* at 15-16. The market capitalization of publicly traded CLECs has dropped by 95 percent since its highest level in late 1999, and "the worth of the industry relative to the RBOCs is even lower than when the Telecommunications Act was first passed." *Id.* at 17. Bates White further observes that most of the CLECs still operating are "highly vulnerable" given that many are still cash flow negative, they have faced severe difficulties in obtaining access to financing, and, when they do obtain financing, their low credit ratings force them to pay especially high interest rates. *Id.* at 18-19.

When considered along with the clear intent of Congress that competitors providing local, access and broadband services would be able to rely on network elements, the fact that competition in the provision of those services is barely surviving (let alone flourishing), it should be clear that the D.C. Circuit's discussion of special access bears no relevance to CLECs. Even in markets in which they have generally been able to rely on network elements (except of course in the many cases where incumbents' unlawful refusals to deal prevented such reliance), CLECs have been unable to flourish.

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[11] One might observe that there is at least competition from cable operators in the provision of mass market broadband services, but cable operators do not rely on incumbent LEC special access to provide these services.

C. Competitive LECs And CMRS Providers Are Not Similarly Situated

Nor is there any basis for inferring from the development of CMRS competition in reliance on special access that similar levels of competition could be achieved in the wireline local, access and broadband markets in reliance on special access. The CMRS market is fundamentally different from the fixed services market. *First*, BOCs have diminished incentives to engage in discriminatory conduct to benefit affiliated CMRS operations. Unlike their wireline operations, the BOCs share ownership of their CMRS operations with other carriers. For example, Verizon owns only 55 percent of Verizon Wireless (Vodafone owns 45 percent), BellSouth owns only 40 percent of Cingular, and SBC owns 60 percent of Cingular. To be sure, these ownership interests are high enough to give the ILECs *some* incentive (absent other factors such as those discussed below) to discriminate. But that incentive is necessarily significantly lower than is the case with an affiliate (or integrated wireline operations) of which a BOC owns 100 percent. Similarly, Qwest owns 100 percent of its CMRS resale operations, but its incentive to discriminate is significantly diminished by the fact that it provides service through the resale of Sprint PCS service. Qwest discrimination in favor of Sprint PCS will benefit not just Qwest, but other providers of Sprint PCS services (including of course Sprint itself).

In addition, BOC-affiliated CMRS providers must offer service in the territories of other BOCs, and those other BOCs have their own affiliated CMRS operations. It is clear therefore that discriminatory behavior in one region could cause other BOCs to retaliate. This further diminishes significantly the incentive of a BOC to discriminate in-region. In contrast, BOCs have not sought to enter out-of-region wireline markets to any significant degree, thus avoiding the threat of retaliation for wireline services.

The BOCs' incentive to engage in predatory conduct against unaffiliated CMRS carriers is likely further diminished by the financial strength and stability of the five (four if the Cingular-AT&T Wireless merger closes) ubiquitous CMRS competitors, a situation that stands in stark contrast with the competitive wireline industry.[12] Wireline CLECs do not have even close to the size, stability or ubiquity of CMRS carriers. Moreover, Commission and Department of Justice oversight of spectrum ownership limits the extent to which any single wireless carrier can acquire another carrier. This means that some other firm will own the other, largely ubiquitous, spectrum ownership rights regardless of the extent to which a BOC may seek to harm that other entity through discrimination.

Second, the BOCs' ability to act on any incentives they have to discriminate in favor of affiliated CMRS operations are significantly more limited than is the case with regard to landline services. Most fundamentally, as explained in the Bates-White study, wireline loop and transport facilities that CMRS providers must obtain as special access typically constitute a much smaller percentage of their total costs than is the case for wireline competitive providers of local, access and broadband services. For example, special access costs were less than three percent of AT&T Wireless' total operating costs in 2003. *See Bates-White* at 53. Special access constitutes a much larger proportion of CLEC costs.

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[12] *See Amendment of the Commission's Rules to Establish Competitive Service Safeguards for Local Exchange Carrier Provision of Commercial Mobile Radio Services; Implementation of Section 601(d) of the Telecommunications Act of 1996*, Report and Order, 12 FCC Rcd 15668, ¶ 63 (1997) (holding that the presence of multiple CMRS carriers in most nationwide markets makes the possibility of an ILEC price squeeze less plausible because such a strategy would only succeed if all competitors could be excluded from the market, an unlikely outcome).

The BOCs' opportunities to engage in anticompetitive behavior are further reduced because Verizon's, BellSouth's and SBC's affiliated CMRS operations are all separate corporate affiliates. This makes discrimination much easier to detect (as explained below) by both regulators and competitors. It should be obvious therefore that the BOCs have neither significant incentives nor the opportunity to engage in anticompetitive discrimination against unaffiliated competitors in the CMRS market.

D. The "ILECs' Incentive To Set The Tariff Price As High As Possible" And To Degrade Service Quality Conclusively Support A Blanket Rule Against Consideration Of Special Access In The Impairment Analysis For Local, Access, And Broadband Services.

Even if it was the case that competition in some parts of the fixed local, access, and broadband have been able to "flourish" notwithstanding reliance on special access, this would not be the case if unbundled network elements were eliminated. The incumbents' "incentive to set the tariff price as high as possible" as well as the incumbents' incentive to degrade service quality as much as possible simply preclude exclusive reliance on special access as an entry vehicle. Indeed, the only reason any wireline competitor has been able to rely on special access up until now is that the availability of network elements has constrained incumbent LEC anticompetitive behavior. Eliminate this constraint and the incumbents would essentially be given free reign to drive their wireline competitors out of the market or at least to relegate them to fringe status.

For special access to constitute a substitute for network elements, the Commission would need to conclude that competitors can compete by relying on special access even for those many customer locations and along those many transport routes on which the ILEC controls the *only* transmission facilities. Moreover, it would need to conclude that this is the case where competitors use the special access service inputs to provide competitive local, access, and

broadband service offerings. But the Commission's precedent and the available marketplace evidence preclude any such conclusion.

It is well established that, where an incumbent LEC has a monopoly over an upstream input needed by competitors in downstream markets, the incumbent LEC has powerful incentives to engage in anticompetitive price and non-price discrimination in the provision of that input to competitors.[13] For example, the incumbent LECs have the incentive to engage in price squeezes,[14] to lock large customers into long term contracts thus artificially reducing the

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[13] *See Applications of Ameritech Corp., Transferor and SBC Communications Inc., Transferee, For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95 and 101 of the Commission's Rule*s, Memorandum Opinion and Order, 14 FCC Rcd 14712, ¶ 202 (1999) ("*Ameritech-SBC Order*"); *Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Second Report and Order, 12 FCC Rcd 15756 ¶ 28 (1997) ("*LEC Classification Order*").

[14] The Commission has explained the problem of price squeezes in the context of the long distance market as follows:

> Absent appropriate regulation, an incumbent LEC and its interexchange affiliate could potentially implement a price squeeze once the incumbent LEC began offering in-region, interexchange toll services. . . . The incumbent LEC could do this by raising the price of interstate access services to all interexchange carriers, which would cause competing in-region carriers to either raise their retail rates to maintain their profit margins or to attempt to maintain their market share by not raising their prices to reflect the increase in access charges, thereby reducing their profit margins. If the competing in-region, interexchange providers raised their prices to recover the increased access charges, the incumbent LEC's interexchange affiliate could seek to expand its market share by not matching the price increase. The incumbent LEC affiliate could also set its in-region, interexchange prices at or below its access prices. Its competitors would then be faced with the choice of lowering their retail rates for interexchange services, thereby reducing their profit margins, or maintaining their retail rates at the higher price and risk losing market share.

Access Charge Reform, First Report and Order, 12 FCC Rcd 15982, ¶ 277 (1997) ("*Access Charge Reform Order*"). The ILECs have the incentive to engage in the same conduct where competitive providers of downstream special access services must purchase loops and transport from the ILEC in the upstream wholesale market (either in the form of special access or unbundled network elements). *See LEC Classification Order* ¶ 134 (concluding that ILECs have the incentive to engage in price squeezes).

size of competitors' addressable market,[15] to engage in strategic pricing to harm competitors with limited network footprints,[16] and to engage in cost misallocation. *See LEC Classification Order* ¶ 10.

The question, then, is whether the regulations applicable to special access are adequate to limit the incumbents' *ability* to act on these incentives where, as is often the case, the incumbent provides the special access service via transmission facilities over which it holds a monopoly and where the CLEC seeks to use the special access as an input in the provision of local, access, or broadband services. Commission precedent answers this question unambiguously. Many times in the past, the Commission has been forced to identify the regulatory constraints that are necessary to limit ILECs' ability to engage in anticompetitive discrimination where competitors' primary means of obtaining access to the ILEC network is through the ILECs' exchange access tariffs (including of course special access). The Commission has offered slightly different explanations and placed varying emphasis on the different applicable regulations depending on the context. Nevertheless, the Commission has consistently relied on the presence of separate affiliate safeguards, affiliate transaction rules, price cap regulation, and (in most cases) the availability of UNEs as, taken together, necessary to prevent ILEC anticompetitive discrimination.

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[15] *See Access Charge Reform*, Fifth Report and Order, 14 FCC Rcd 14221, ¶ 79 (1999) ("*Pricing Flexibility Order*") ("An incumbent can forestall the entry of potential competitors by 'locking up' large customers by offering them volume and term discounts at or below cost.").

[16] *See Southwestern Bell Telephone Company, Tariff FCC No. 73*, Order Concluding Investigation and Denying Application for Review, 12 FCC Rcd 19311, ¶¶ 51-53 (1997).

For example, in the context of BOC in-region entry into the interLATA market, the FCC considered the regulations needed to constrain the BOCs' opportunities to leverage control over upstream transmission inputs by harming competition in downstream markets. There, the FCC concluded, in general, that the detailed prohibitions against discrimination in Section 272(c) and (e) combined with "the structural separation requirements of section 272(b)" and in particular the requirement that "an affiliate must obtain any [ILEC] facilities on an arm's length basis pursuant to section 272(b)(5), thereby increasing the transparency of transaction between a BOC and its affiliates" (*LEC Classification Order* ¶ 116) were necessary to prevent discrimination. As to price squeezes, the FCC recognized that "absent appropriate safeguards" a BOC would engage in this type of exclusionary discrimination. *Id*. ¶ 125. In fact, the FCC acknowledged that above-cost access charges could create opportunities for BOCs to engage in price squeezes, and it rejected the BOCs' argument that price squeeze strategies would be unprofitable. *See id*. ¶ 127. The FCC held that the risk of such discrimination could be addressed by a combination of separate affiliate requirements, price cap regulation of BOC exchange access services and the "ability of competing carriers to acquire access through the purchase of unbundled network elements." *Id*. ¶ 126.[17]

Similarly, in the *Access Charge Reform* proceeding, the Commission responded to the specific argument that "interstate access charges [including special access charges] that are

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[17] In addressing price squeezes, the FCC placed special emphasis on the availability of UNEs. It explained that, "[w]e agree with commenters that assert that the risk of the BOCs engaging in a price squeeze will be greatly reduced when interLATA competitors gain the ability to purchase access to the BOCs' networks at or near cost. . . . As noted, we believe that the ability of competing carriers to acquire access through the purchase of unbundled elements enables them to avoid originating access charges and thus partially protect themselves against a price squeeze." *Id.* ¶ 130.

above the true economic cost of providing the underlying services" give ILECs the opportunity to engage in price squeezes in the long distance market. *Access Charge Reform Order* ¶ 276. The Commission explained that "although an incumbent LEC's control of exchange and exchange access facilities may give it the incentive and ability to engage in a price squeeze, we have in place adequate safeguards against such conduct." *Id.* ¶ 278. Those "adequate safeguards" consisted of price cap regulation combined with separate affiliate requirements applicable to both independent and BOC in-region long distance services and the availability of cost-based UNEs. *See id.* ¶¶ 278-280. As to the latter, the Commission explained that "so long as an incumbent LEC is required to provide unbundled network elements quickly, at economic cost, and in adequate quantities, an attempted price squeeze seems likely to induce substantial additional entry in local markets." *Id.* ¶ 280.

The Commission later retreated somewhat from its reliance on the availability of UNEs in the *Supplemental Order Clarification*[18] of the *UNE Remand Order*[19] in which it established temporary use restrictions on unbundled loop-transport combinations. The use restrictions established special access as the only means of purchasing loop-transport combinations where the long distance carrier could not demonstrate that it provided a "significant amount of local exchange service" over the facilities. *Supplemental Order Clarification* ¶ 22. Although some parties argued that this would allow ILECs to engage in price squeezes or other anticompetitive

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[18] *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Supplemental Order Clarification, 15 FCC Rcd 9587 (2000) ("*Supplemental Order Clarification*").

[19] S*ee Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Notice of Proposed Rulemaking, 15 FCC Rcd 3696 (1999) ("*UNE Remand Order*").

practices in the downstream long distance market,[20] the Commission disagreed. It explained that "Congress anticipated that some Bell Operating Companies ('BOCs') would obtain authorization under 47 U.S.C. § 271 to originate in-region long distance services before the completion of access charge reform," thus leaving special access charges above cost. *See id*. ¶ 19. To address this problem, "Congress therefore enacted Section 272, which requires a BOC competing in the in-region long distance market to create a separate long-distance affiliate and to recover access charges from that affiliate on the same basis on which it recovers such charges from unaffiliated carriers." *Id*. The Commission stated that it had "consistently determined" that "those structural and non-discrimination requirements provide adequate safeguards" against anticompetitive behavior. *Id*. ¶ 20. In addition, the Commission stated that, since the use restrictions were "merely temporary" it would be free to take into account any anticompetitive behavior when it established permanent rules. *See id.*

None of the protections that the Commission has relied upon as diminishing the ILECs' opportunities to engage in price and non-price discrimination would be available if competitors were required to rely exclusively on special access as inputs to services offered in competition with the ILECs' own integrated service offerings. *First*, neither the separate affiliate requirement nor the affiliate transaction rules would apply. ILECs provide local exchange, exchange access and (in almost all cases) broadband services on an integrated basis. Thus, separate affiliate and affiliate transaction rules that the FCC deemed necessary in the interLATA market to prevent the BOCs from acting on their powerful incentives to discriminate are absent

[20] The obvious impetus for these rules was the recognition that special access rates were well above cost-based rates for loop-transport combinations.

in the local and access markets. It is also significant that the Commission has been allowing the Section 272 separate affiliate requirements to sunset without any analysis as to the consequences for competition. This fact merely increases the ILECs' opportunities to act on their incentive to discriminate against wireline service competitors.

Second, neither price caps nor any service quality regulations come close to providing the protections needed to stop BOC anticompetitive conduct. Federal special access regulation provides essentially no regulatory constraint on ILEC anticompetitive pricing practices for such inputs. Under the pricing flexibility rules, ILECs are freed entirely from price regulation other than the obligation to file tariffs (without cost support data) when they receive Phase II pricing flexibility. *See Pricing Flexibility Order* ¶ 153. To obtain Phase II pricing flexibility for interoffice transport throughout an MSA, an ILEC need only show that *one* collocated carrier using non-ILEC interoffice transport is present in 50 percent of the wire centers in the MSA or in wire centers representing 65 percent of the ILEC's transport revenues in an MSA. *See Pricing Flexibility Order* ¶¶ 148-149. To obtain Phase II pricing flexibility for special access channel terminations throughout an MSA, an ILEC need only show that one collocated carrier using non-ILEC *transport* is present in 65 percent of the wire centers in the MSA or in wire centers representing 85 percent of the ILEC's channel termination revenues in the MSA. *See id.* ¶ 150.

The Commission adopted these triggers based on its predictive judgment that collocation by a single provider of transport in certain wire center offices would serve as a reliable proxy for sunk investment in competitive facilities that limit the ILECs' opportunities to engage in exclusionary behavior. But (as experience has shown) this predictive judgment was utterly unrealistic. The problem is most obvious with regard to channel termination loops (the most intractable bottleneck facility). Under the triggers, an ILEC can be freed from all rate regulation

applicable to special access loops regardless of whether a single non-ILEC loop has been deployed in an MSA. It need only show that there has been some transport deployed in the MSA. But the deployment of some transport in a geographic area offers no basis at all for determining whether loop facilities will be deployed. Experience demonstrates that, even in the densest downtown areas where significant non-ILEC transport can be deployed, there are many commercial buildings to which it is impossible to deploy loop facilities because of obstacles associated with building access, access to public rights-of-way, customers' unwillingness to tolerate the delay needed to construct loops, and the relatively small revenue opportunities associated with many downtown customer locations. In those locations (which comprise the vast majority of commercial building locations), Phase II pricing flexibility offers the ILECs free reign to engage in unreasonable and anticompetitive pricing.[21]

The triggers for special access transport are nearly as flawed as those for special access loops. The obvious problem with the transport triggers is that they free ILECs from price regulation throughout an entire MSA when only a single competitor has deployed transport on a single transport route connecting a fraction of the wire centers in the MSA.[22] Thus, the ILEC

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[21] The FCC openly acknowledged the flaws in its channel termination triggers in the *Pricing Flexibility Order*:

> As a number of parties indicate, a competitor collocating in a LEC end office continues to rely on the LEC's facilities for the channel termination between the end office and the customer premises, at least initially, and thus is susceptible to exclusionary pricing behavior by the LEC, and so collocation by competitors does not provide direct evidence of sunk investment by competitors in channel terminations between the end office and the customer premises.

Pricing Flexibility Order ¶ 103. Notwithstanding "the shortcomings of collocation as a measure of competition for channel terminations between end offices and customer premises," the Commission decided to use it anyway because "it appears to be the best option available to us at this time." *Id*.

[22] In this regard as well the FCC admitted that its adoption of proxy triggers exposed competition to significant risks. As it explained in the *Pricing Flexibility Order*, "[w]e acknowledge that, because we will evaluate pricing flexibility requests on an MSA basis and do not require the presence of competitive facilities in every wire center in

may escape rate regulation throughout an MSA where it faces competitive entry on only a tiny fraction of the interoffice routes within that MSA. The FCC subsequently repudiated this approach as entirely inappropriate for assessing ILEC market power in the provision of interoffice transport. As it explained in the *Triennial Review Order*:

> The record indicates that incumbent LECs have qualified for special access pricing flexibility in numerous MSAs throughout their regions, almost exclusively by meeting the triggers based on special access revenues. Because the revenue trigger requires only a single collocated competitor and the purchase of substantial amounts of special access in a concentrated area, this test provides little indication that competitors have self-deployed alternative facilities, or are not impaired outside of a few highly concentrated wire centers.

Triennial Review Order ¶ 397. Furthermore, in adopting the pricing flexibility rules, the Commission assumed that ILECs would, in general, be precluded by the triggers from charging special access rates that are significantly above cost because, "[i]f an incumbent LEC charges an unreasonably high rate for access to an area that lacks a competitive alternative, that rate will induce competitive entry, and that entry will in turn drive down rates." *Pricing Flexibility Order* ¶ 144. But the entry barriers associated with facilities deployment often preclude such competitive entry. As a result, as AT&T has demonstrated, the ILECs' special access prices are (in the aggregate) significantly above cost years after the pricing flexibility rules went into effect. *See AT&T Petition for Rulemaking*, RM No. 10593 (filed Oct. 15, 2002) ("*AT&T Petition*"). Above-cost rates offer much greater opportunities for price squeezes since the ILEC can charge above-cost prices to itself (*i.e.*, it can continue to make a profit) that are still lower than the prices it charges competitors.

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an MSA, there remains a theoretical possibility that an incumbent LEC could use pricing flexibility in a predatory manner to deter investment in competitive facilities in those wire centers where it as yet faces no competition." *Id*. ¶ 83.

Notwithstanding the Commission's obvious failure to establish adequate regulation for special access *per se*, the Commission appears to have assumed that the existence of separate affiliate safeguards in the in-region long distance business would limit ILECs' opportunities to act on their incentive to discriminate. At the time the *Pricing Flexibility Order* was adopted, the Commission assumed that special access would be purchased by IXCs. "[W]e note that these services generally are purchased by IXCs." *Pricing Flexibility Order* ¶ 155. *See also id*. ¶ 142. The Commission *did not even consider* the possibility that competitive providers of local exchange and special access services would themselves purchase loops and transport from ILECs under special access tariffs. In fact, in explaining why ILECs would be unlikely to exploit pricing flexibility to discriminate unreasonably among special access customers, the Commission emphasized that the "IXCs and large businesses" that purchase special access "generate significant revenues for the incumbent and are not without bargaining power with respect to the incumbent." *Id.* Obviously, most CLECs lack any such bargaining power. Moreover, the FCC also assumed that ILECs would sell special access to competitors only in markets where the ILECs' own downstream retail offerings were subject to separate affiliate requirements.[23] But of

[23] For example, the FCC assumed that BOCs would be providing in-region long distance through Section 272 affiliates: "[o]nce the Commission grants BOCs permission, pursuant to section 271 of the Act, 47 U.S.C. § 271, to provide in-region long distance services, they are required to offer those services through separate affiliates." *Pricing Flexibility Order* n.345. Similarly, the Commission relied on the fact that non-BOC ILECs would also be subject to separate affiliate requirements for their in-region long distance service offerings. Throughout the *Pricing Flexibility Order*, the Commission referred to ILEC in-region long distance offerings as provided through "affiliates" (*see, e.g., id*. ¶¶ 129, 134-135). The FCC even established special protections against ILEC price discrimination in the provision of special access that are only relevant where the ILEC provides retail service through a separate affiliate. *See id.* ¶ 129 (prohibiting an ILEC from offering a contract tariff to an affiliate unless and until an unaffiliated customer first purchases service pursuant to the contract).

course, no such protections apply in the local and special access markets in which the ILECs provide service on an integrated basis.[24]

From all of this it is clear that neither separate affiliate nor effective rate regulation of special access would be available to protect competitors from discriminatory pricing if they were forced to rely on special access as the only means of obtaining transmission inputs. But competitors would also be powerless to prevent incumbent LEC discrimination in the quality of special access service. In fact, the ILECs are at least as free to engage in non-price discrimination as price discrimination in the provision of special access. The exclusion of special access from the Section 271 checklist and the absence of any viable federal special access service quality regulations leaves the door wide open for the ILECs to engage in non-price discrimination. Indeed, the Commission held that, even in the presence of separate affiliate requirements, non-price discrimination cannot be detected and punished absent comprehensive service quality performance requirements for access service.[25] The Commission found further that reporting requirements will "increase[] the likelihood that potential discrimination can be detected and penalized" and will "decrease[] the danger that discrimination will occur in the first place." *Id.* ¶ 243. The Commission reached these conclusions in December 1996, before the

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[24] The Commission's decision to allow Section 272 separate affiliates to sunset by operation of the statute without any analysis of the consequences of such action for competition has only expanded the BOCs' opportunity to discriminate in the provision of special access to the in-region interLATA market.

[25] *Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended,.* First Report and Order, 11 FCC Rcd 21905, ¶ 242 (1996). ("*Non-Accounting Safeguards Order*").

BOC mergers increased the participants' incentive to discriminate.[26] Notwithstanding this conclusion, the Commission failed to adopt performance requirements for special access.

Nevertheless, since the *Non-Accounting Safeguards Order*, the Commission has repeatedly recognized the need for special access performance rules. For example, in an NPRM addressing this issue, the Commission explained that special access performance measurements applicable to all incumbent LECs "would provide greater transparency of the incumbent LECs' special access provisioning process" and "should provide a disincentive to the incumbents to engage in any discriminatory activities with respect to these services."[27] More recently, the Commission acknowledged in the *OI&M Order* that there is "a relationship between" the elimination of the OI&M sharing prohibition and the need for performance rules by stating that "we commit to addressing special access performance metrics in [the special access performance measurements] proceeding expeditiously."[28] It follows that the need is far greater in the local

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[26] *See Ameritech-SBC Order* ¶ 3 (1999); *NYNEX Corporation Transferor, - and - Bell Atlantic Corporation Transferee, For Consent to Transfer Control of NYNEX Corporation and Its Subsidiaries*, Memorandum Opinion and Order, 12 FCC Rcd 19985, ¶ 124 (1997).

[27] *Performance Measurements and Standards for Interstate Special Access Services; Petition of U S West, Inc., for a Declaratory Ruling Preempting State Commission Proceedings to Regulate U S West's Provision of Federally Tariffed Interstate Services; Petition of Association for Local Telecommunications Services for Declaratory Ruling; Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as amended; 2000 Biennial Regulatory Review - Telecommunications Service Quality Reporting Requirements; AT&T Corp. Petition to Establish Performance Standards, Reporting Requirements, and Self-Executing Remedies Needed to Ensure Compliance by ILECs with Their Statutory Obligations Regarding Special Access Services,* Notice of Proposed Rulemaking, 16 FCC Rcd 20896, ¶ 13 (2001).

[28] *Section 272(b)(1)'s "Operate Independently" Requirement for Section 272 Affiliates; Petition of SBC for Forbearance from the Prohibition of Sharing Operating, Installation, and Maintenance Functions under Sections 53.203(a)(2) and 53.203(a)(3) of the Commission's Rules and Modification of Operating, Installation, and Maintenance Conditions Contained in the SBC/Ameritech Merger Order; Petition of BellSouth Corporation for Forbearance from the Prohibition of Sharing Operating, Installation, and Maintenance Functions Under Section 53.203(a)(2)-(3) of the Commission's Rules; Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, Report and Order and Memorandum Opinion and Order, 19 FCC Rcd 5102, ¶ 24 (2004) ("*OI&M Order*").

and access markets where ILEC wholesale and retail operations share *every facility, employee and asset*. The opportunities for undetected non-price discrimination in that context are essentially unlimited.

Thus, the *only* existing constraint on incumbent LEC price and non-price discrimination in the provision of special access has been the availability of network elements. Competitors that may have relied on special access in the past would be prevented from doing so after network elements are eliminated. As Time Warner Telecom has explained, for example, its reliance on special access has been possible because of the constraining influence of unbundled network elements on both the price and service quality incumbents provide for special access.[29] Any competitor seeking to purchase special access could in the past threaten the incumbent that failure to provide special access on reasonable terms and conditions would simply cause the competitor to purchase UNEs. Moreover, incumbents have had strong incentives to show that special access is a viable alternative to network elements, and they have therefore agreed to offer volume and term discounts for special access. But, once network elements are eliminated, the incumbents would no longer have any incentive to provide such discounts or to keep special access service quality more or less in check. The incumbents would be completely free to engage in anticompetitive behavior.

In fact, there is already evidence that above-cost special access prices have resulted in price squeezes in several markets.[30] For example, firms that provide competitive DS1 service to

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[29] *See ex parte* presentation of Time Warner Telecom, CC Dkt. Nos. 01-338 *et al.* at 1-2 (filed Sept. 8, 2004).

[30] *See Gawlick Lightship Dec.* ¶¶ 13-15 and Attachment 1 (description and chart showing wide disparity between ILEC UNE and special access rates and effective price squeeze if ILEC UNEs were no longer available).

small- and medium-sized business customers have demonstrated that their costs would be increased to unsustainable levels if they were forced to rely on special access, even at today's prices.[31] According to one study, reliance on special access instead of unbundled DS1s would cause CLECs to pay nearly an additional $2 billion per year to the incumbents under current special access prices. This would lead to an increase in costs on average of 25 percent per line, and, in all but two states, competitors would be forced to exit the market because their retail offerings would no longer be competitive.[32]

Competitors in the provision of frame relay are encountering similar problems. For example, Bellsouth recently offered a service in its region in which the end user could obtain special access services below the tariffed rate, but only if they agreed to purchase frame relay service as well. This has precluded retail competition with Bellsouth because the price of resold BellSouth special access combined with a competitor's own frame relay offering would have exceeded the price of Bellsouth's bundled retail offering. *See AT&T Petition* at 24. SBC's special access prices have also forced competitors in the downstream frame relay market into a price squeeze.[33] More generally, AT&T's analysis of frame relay prices across the market shows

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[31] *See* Letter of Michael H. Pryor, Counsel for NuVox Communications, to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.*, at 16 (filed Aug. 19, 2004) ("*NuVox August 19 Letter*") ("…substituting special access rates [for UNEs] is not economically viable for NuVox"); Letter of Christopher T. McKee, XO Communications Inc., to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.,* at 17 (filed Aug. 11, 2004) ("…XO cannot implement its market entry plan and cannot achieve profitability if it is forced to rely exclusively on special access in perpetuity."); Letter of H. Russell Frisby, Jr. CEO, Comptel/Ascent, to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et al.,* at 2 (filed Jul. 9, 2004) ("*Comptel July 9 Letter*").

[32] *See* THE ECONOMIC IMPACT OF THE ELIMINATION OF DS-1 LOOPS AND TRANSPORT AS UNBUNDLED NETWORK ELEMENTS, Microeconomic Consulting and Research Associates, Inc. (MiCRA), June 29, 2004 at 10 ("*MiCRA Study*") attached to *Comptel July 9 Letter*. In some states, the monthly increase per line was extremely large, with a $712 increase in Illinois, $818 in Michigan and $747 in Ohio. *See id.* at 9-10.

[33] *See ex parte* presentation of AT&T, CC Dkt. Nos. 02-112 *et. al*., at 5-10 (filed Aug. 9, 2004).

that incumbent LECs' wholesale special access rates consistently exceeded the AT&T retail rate for local frame relay service, sometimes by as much as 150 percent. In more than half the markets studied by AT&T, the access tariff rate was higher than the incumbent LEC charged at retail for the combined special access/frame relay service.[34]

The incumbent LECs claim that price squeezes and high special access tariffed rates are mitigated by volume and term discounts off of the monthly tariffed special access rates.[35] But as NuVox has demonstrated, even the prices under the existing discounts for DS1s are well above network element prices,[36] a differential that competitors are unlikely to be able to sustain. More fundamentally, as Qwest's recent increase of approximately 20 percent on its month-to-month special access rates demonstrates, the tariffing regime leaves the incumbents more or less free to unilaterally raise the rate *to which the discounts apply*.[37] The net result is, of course, higher rates even for competitors that have taken advantage of volume/term discounts.

Furthermore, the discounts can only be obtained if CLECs submit to being locked into long term, high-volume contracts for special access. As the Commission has recognized, these long term contracts are themselves anticompetitive because they allow the incumbents to lock-in

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[34] *See* Comments of AT&T, CC Dkt. No. 01-337, attach. C, Declaration of Alan Benway, at 7 (filed Mar. 1, 2002).

[35] *See, e.g.,* Letter of Joseph Mulieri, Verizon, to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.*, at 2 (filed Jul. 13, 2004); Verizon *ex parte* presentation, *Competing Providers Are Successfully Providing High-Capacity Services To Customers Without Using Unbundled Elements*, CC Dkt. Nos. 01-338 *et. al*., at 10 (filed Jul. 2, 2004) ("*Verizon July 2 ex parte*") (discussing volume and term discounts depending upon the term of the agreement).

[36] *See NuVox August 19 Letter* at 15; *see also Jennings Declaration* at Table 2 comparing the price of UNE/EEL rates on month-to-month and term contract basis with special access rates).

[37] *See Petition of Time Warner Telecom to Reject or, Alternatively, Suspend and Investigate*, Revisions of Qwest Corporation to Tariff F.C.C. No. 1, Transmittal No. 206 at 9 (filed Aug. 23, 2004) ("*TWTC Tariff Petition"*).

the market and effectively raise the price of bypassing the incumbents' transmission facilities.[38] Indeed, by effectively increasing the price of deploying competitors' own facilities, the volume and term commitments completely undermine the policy goal of the Act to encourage facilities-based competition.

The incumbents' lock-in strategy is especially effective for incumbent LECs with large service territories because they can discount in areas subject to competition, such as densely populated cities, while raising rates in outlying areas with little or no competition. *See id.* n. 213. An incumbent simply stipulates that the competitor may only receive a discount if it purchases the incumbent's special access in both competitive and non-competitive areas, and the competitor, without an alternative in outlying areas, must acquiesce.[39]

There is evidence from the BOCs' own submissions that they already engage in this type of selective discounting. These BOC contracts often have substantial termination penalties, additional penalties if volume targets are not met, and require carriers to purchase all or a large portion of their special access needs from the BOCs, foreclosing wholesale competition.

These examples of anticompetitive behavior are just the tip of the iceberg. If UNEs are eliminated, these tactics will become more widespread and aggressive. No wireline competitor, regardless of the services it provides, the customers it serves, or the geographic areas in which it

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[38] *See Pricing Flexibility Order* ¶ 79 ("An incumbent can forestall the entry of potential competitors by "locking up" large customers by offering them volume and term discounts at or below cost. Specifically, large customers may create the inducement for potential competitors to invest in sunk facilities which, once sunk, can be used to serve adjacent smaller customers. To the extent the incumbent can lock in the larger business customers whose traffic would economically justify the construction of new facilities, the incumbent can foreclose competition for the smaller customers as well.").

[39] Areeda and Hovenkamp note that this form of predation is particularly likely since the predator need only reduce its price to predatory levels in a subset of it output rather than all of it. *See* 3A PHILLIP E. AREEDA, HERBERT HOVENKAMP AND JOHN SOLOW, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 745 (2d ed. 2002).

operates will be sheltered from this behavior.[40] It strains credulity to assert that competitors could "flourish" in such an environment. They are much more likely to be simply driven from the market or forced to operate as merely fringe competitors.

E. Even If Individual Competitors Could Rely On Special Access After The Elimination Of UNEs, It Would Be Administratively Impossible For The Commission To Differentiate Among Markets For Purposes Of The Impairment Analysis.

Even if one could theoretically posit that competitors could rely on special access to serve some customers in some geographic areas for some period of time without access to network elements, it would be administratively impossible to identify these markets and distinguish them from markets in which competitors could not rely on special access. Such an undertaking would require an examination of the margins in serving a particular customer class in a particular geographic market and comparing those margins with the input prices competitors pay for special access. It would also require an examination of the percentage of overall costs that special access represents for competitors serving different types of customers. Of course this analysis would be hugely complicated by the fact that the input prices themselves vary enormously from significant discounts granted to large purchasers of special access to much more modest discounts granted to smaller purchasers. Moreover, as mentioned, the underlying month-to-month rates to which most discounts apply are subject to unilateral change by the incumbents. In addition, all negotiated discount agreements expire and are subject to renegotiation on likely less favorable terms in the future. Given all of these variables, it is simply inconceivable that even the most talented and dedicated regulator would be able to

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[40] *See Evans Dec*. ¶¶ 22-25 (special access services cannot substitute for UNE DS1s); *Shanahan Dec*. ¶¶ 15-16, 21 (same).

identify the markets for which special access for some period of time is a viable means of entry. The only logical remedy for this problem is a blanket rule deeming the availability of special access irrelevant to the impairment analysis.

IV. THE COMMISSION SHOULD REQUIRE THAT LOOPS OF EVERY CAPACITY AND TYPE EXCEPT OCN BE UNBUNDLED

The manner in which the Commission conducted its impairment analysis for loops in the *Triennial Review Order* is extremely important for purposes of this proceeding. In performing its analysis, the Commission attempted to "balance[]" its unbundling regime between a broad exemption from unbundling of next-generation fiber and packetized loops on the one hand and the continued availability on a national basis (except where impairment triggers were met) of unbundled legacy copper and TDM-based loops on the other hand. *See Triennial Review Order* ¶ 200.

The Commission's impairment findings regarding legacy loop facilities are sound and would need to be readopted here regardless of whether they were accompanied by the overbroad exemption from unbundling next-generation loops. As to the legacy facilities, the Commission conducted a separate impairment analysis for DS0, subloops, inside wire, network interface devices, DS1, DS3, OCn and dark fiber loops in the *Triennial Review Order*. It reached a national impairment finding for DS0 loops, subloops, inside wire, and network interface devices, established a national presumption of impairment for DS1, DS3, and dark fiber loops and reached a national finding of non-impairment for OCn loops as well as for the high frequency portion of copper loops (subject to a three-year transition). The presumption of impairment for DS1, DS3 and dark fiber loops could be rebutted where a state, applying impairment triggers, found that there are two wholesalers of DS1 loops for a specific customer location or that there are two self-provisioners or two wholesalers of DS3 or dark fiber loops for a specific location.

This approach was firmly based on market realities. As the Commission found, "[c]onstructing loop plant is both costly and time consuming, regardless of the type of loop being deployed," and "most of the costs of constructing loops are sunk costs." *Triennial Review Order* ¶ 205. The large sunk costs pose obvious and daunting entry barriers, thus justifying broad findings of impairment.[41] The Commission's separate analysis of different types of loops was also appropriate because each type of loop offers different opportunities for competitors "to offset construction costs in an economically feasible timeframe." *Id.* ¶ 206. Moreover, entry barriers such as those associated with building access and customers' unwillingness to incur the delay and inconvenience of loop deployment (discussed further below) fully justified the use of customer location-specific triggers, rather than triggers that utilize broader geographic markets.

The D.C. Circuit did not address, let alone criticize, the Commission's analysis of DS0, subloops, inside wire, network interface devices, DS1, DS3, or dark fiber loops in *USTA II*. The only portion of the *USTA II* discussion that remotely relates to the soundness of the Commission's approach to these facilities is the court's conclusion that the Commission unlawfully subdelegated responsibility for administering the analogous switching and transport triggers adopted in the *Triennial Review Order*. This issue is easily addressed in this proceeding by ensuring that the Commission itself applies the impairment standard in the manner discussed below.

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[41] The data submitted in the Triennial Review proceeding indicates that there is widespread impairment for loops of all kinds. *See, e.g., AT&T Petition,* Declaration of Kenneth Thomas at 3 ("AT&T reaches only about 5% of the buildings it serves using its own or CLEC facilities); Sprint Comments, CC Dkt. Nos. 01-338 *et al.,* at 23 (filed Apr. 5, 2002).

Moreover, although ALTS continues to strenuously oppose the broadband exemption,[42] to the extent the Commission retains the exemption, the case for broad unbundling of "legacy" loop facilities is unimpeachable. In *USTA II*, the court explained that the Commission could have accommodated the D.C. Circuit's ruling in *USTA I* that the unbundling regime account for both the costs and benefits of unbundling by either using (1) a standard that required unbundling only where a loop exhibited something close to natural monopoly characteristics or (2) a "looser concept of impairment" under which the "costs" of unbundling would be reflected in unbundling exemptions, such as the broadband exemption, adopted pursuant to the "at a minimum" language of Section 251(d)(2). *USTA II* at 572. Thus, putting aside the fact that the broadband exemptions should never have been adopted in the first place, now that they have been, they form the legal basis for relatively broad unbundling obligations as applied to the legacy and TDM-based facilities discussed below.

Of course that legal basis is powerfully supported by sound public policy. In the absence of next-generation loops, even in service and geographic markets in which the Commission openly acknowledged that competitors are impaired, the only way consumers will benefit from any competition is if competitors are able to obtain legacy loops. Moreover, the Commission

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[42] For reasons that have been explained at length elsewhere, the broad exemption from unbundling new fiber loops and the packetized capabilities of hybrid loops adopted in the *Triennial Review Order* is bad policy and contrary to the purposes underlying the Communications Act. *See, e.g.,* Opening Brief of CLEC Petitioners and Intervenors in Support at 22-29, *United States Telecomm. Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (No. 00-1213 *et. al.*). Among other things, the approach adopted in the *Triennial Review Order* relegates competitors to increasingly outmoded technology regardless of whether it is economic for them to deploy fiber to a particular location. *See, e.g.,* Reply Brief of CLEC Petitioners and Intervenors in Support at 14, *United States Telecomm. Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004) (No. 00-1213 *et. al.*). In addition, the policy adopted in the *Triennial Review Order* promises incumbents that they can, over time, reacquire their monopoly over high capacity services to small businesses if they deploy fiber feeder facilities in direct contradiction of the policy goals of the Act. *See id.* at 14-16.

can and should err on the side of ensuring that these loops are available broadly because the continued availability of old technology carries few costs in terms of foregone incumbent investment and innovation. In sum, the benefits of retaining DS0, DS1, DS3 and dark fiber loops are enormous and the costs are extremely limited.

Finally, it is important to recognize that the D.C. Circuit implicitly agreed with the Commission's decision to insist on the presence of at least *two* competitors in a particular location before reaching a finding of non-impairment. As the court observed in its general discussion of the impairment standard, the concept of impairment in the statute "reaches beyond natural monopoly." *Id.* at 572. A natural monopoly a market in which a service can be provided more efficiently by a single firm (with declining average marginal costs over the range of demand in the market) than by multiple firms.[43] A test designed only to identify markets that are characterized by natural monopoly would merely tie impairment to the presence of a single competitor. That the statute "reaches beyond" natural monopoly indicates that at the very least two competitors must be able to serve the market. This reading is buttressed by the court's statement in *USTA I* that impairment does not exist where "multiple competitive" suppliers can be found (*see USTA I* at 427) and the court's implicit recognition in *USTA II* that the test for interoffice transport should be whether "multiple competitors" are able to serve a particular transport route. *See USTA II* at 375. Thus, Commission's determination in the *Triennial Review*

[43] *See* Robert B. Friedrich, *Regulatory and Antitrust Implications of Emerging Competition in Local Access Telecommunications: How Congress and the FCC Can Encourage Competition and Technological Progress in Telecommunications*, 80 CORNELL L. REV. 646, n.34 (1995) ("The local access sector of the telecommunications industry traditionally has been considered a natural monopoly because of the high capital costs of entry and sharply declining long-run average costs.").

Order that at least two competitors must be able to provide alternative loop facilities in a particular location rests on solid legal ground and need not be revisited.

For all of these reasons, the Commission should largely re-adopt its conclusions regarding loop unbundling from the *Triennial Review Order*. In fact, as explained below, the Commission need only make modest adjustments to the loop unbundling regime to reflect the information gathered in the state implementation proceedings and, if the application of impairment triggers is necessary, to make it easier for the Commission to administer the impairment triggers for DS3 and dark fiber loops.

A. DS0/Voice Grade Loops Should Be Subject To A Nationwide Finding Of Impairment.

In the *Triennial Review Order*, the Commission applied its "balancing test" to determine unbundling of voice grade loops and other loops serving residential and other mass market customers. On the one hand, it sought to spur broadband deployment to advance the goals of Section 706 by establishing a broad exemption from unbundling of newly deployed fiber loops even though competitors would likely be impaired without access to such loops.[44] On the other hand, the Commission sought to preserve competition by adopting "extensive unbundling of the legacy loop facilities." *Id.* ¶ 234.

In assessing the entry barriers relevant to its impairment standard, the Commission found that deploying local loops for mass market customers is "prohibitively expensive" (*id.* n.716) and that the costs are "largely fixed and sunk" (*id.* ¶ 237). Competitors can have little confidence

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[44] The Commission stated only that the "additional revenue opportunities" associated with newly deployed fiber loops "may alleviate . . . at least some" of the entry barriers associated with deploying loops to mass market customers. *Id.* ¶ 236. Obviously, the Commission assumed that competitors would be impaired, perhaps severely so, without access to fiber loops once deployed, and yet nevertheless exempted such loops from unbundling.

that they can recover these costs because, "[i]n contrast to the enterprise market . . . long-term contracts are not commonplace in the mass market." *Id.* The Commission also observed that incumbents have significant first mover advantages, such as preferential access to rights-of-way and established brand name recognition that "compound the entry barriers" associated with the "steep costs" of deployment. *Id.* ¶ 238.

The market evidence demonstrated that there were virtually no competitive sources of mass market loops.[45] Based on the factual record, therefore, the Commission concluded that "requesting carriers are generally impaired on a national basis without unbundled access to an incumbent LEC's local loops, whether they seek to provide narrowband or broadband services, or both." *Id.* ¶ 248. Application of the Commission's balancing test did not, however, yield widespread unbundling. The Commission concluded that incumbents must provide stand-alone copper loops, including those conditioned for purposes of providing broadband, as well as subloops as UNEs on a national basis (*see id.* ¶¶ 249, 253), but it eliminated essentially all network elements competitors needed to provide broadband to the mass market.[46]

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[45] The Commission concluded that "incumbent LECs continue to control the vast majority of voice-grade local loops throughout the nation." *Triennial Review Order* ¶ 224. The Commission observed further that "[n]o party seriously asserts that competitive LECs are self-deploying copper loops" (*id.* ¶ 226), competitors had deployed fiber loops to only a tiny number of mass market customers (7.7 percent of the total 26,000 homes served by such facilities) (*see id.* ¶ 227), cable telephony was only available to about 9.6 percent of the total households nationwide (*see id.* ¶ 229), CMRS service constituted a substitute for wireline narrowband service for only about three to five percent of CMRS subscribers (*see id.* ¶ 230), and that fixed wireless and satellite services remained "nascent technologies, with limited availability." *Id.* ¶ 231. The Commission also found that "no third parties are effectively offering, on a wholesale basis, alternative local loops capable of providing narrowband or broadband transmission capabilities to the mass market." *Id.* ¶ 233. The Commission did conclude, however, that cable modem services offered some competitive discipline for incumbent LEC mass market broadband service.

[46] Specifically, the Commission required that the incumbents make line splitting capabilities available to competitors (*see id.* ¶ 251), but it eliminated the requirement that incumbents unbundle the high frequency portion of copper loops subject to a transition. *See id.* ¶ 255. The Commission eliminated all unbundling for new fiber-to-the-premises loops (*see id.* ¶ 273) and for such facilities in over build situations, so long as the incumbent retains the copper loop for unbundling or makes a voice grade transmission path available to competitors on overbuilt routes

At least as to voice grade loops, the Commission's decision in the *Triennial Review Order* remains eminently sound. The market evidence demonstrates that competitive LECs continue to be impaired without access to voice grade loops. It is still the case that there are few locations in which non-incumbent LECs have deployed substitutes for voice grade loops. For example, CMRS does not constitute a substitute for traditional wireline voice service. Indeed, SBC/Bellsouth-owned Cingular and AT&T, in their recent merger application, made clear that they believe wireless and wireline networks are not substitutes.[47] Sprint has offered further support for this conclusion.[48]

Marketplace activity also illustrates that CMRS is not a substitute for wireline service. For example, in April 2004, only 49,000 of 1,381,000 or 3.5% of the numbers ported to new carriers were from wireline to wireless.[49] Verizon has described the numbers of customers porting from wireline to wireless as "very, very small" and "insignificant."[50] An SBC executive noted that "[t]here [ha]ve, been a couple here and a couple there, but no mass migration."[51]

See id. ¶ 277. Importantly, the Commission expressly relied upon the continued availability of copper loops as a basis for concluding that competition would not be harmed by the artificial exemption from unbundling fiber loops.

[47] *See*, A*T&T Wireless Corporation and Cingular Wireless Corporation Joint Application for Transfer of Control of Licenses and Authorizations,* WT Dkt. No. 04-70, Declaration of Richard Gilbert, ¶ 44 (filed Mar. 18, 2004) ("Customer substitution from wireless to wireline would not be sufficient to make unprofitable a small but significant non-transitory price increase by a hypothetical monopoly supplier of mobile wireless voice services. At the present time, wireline service is sufficiently differentiated from wireless service to exclude wireline from the relevant product market.").

[48] *See* Comments of Sprint Corporation, CC Dkt. No. 01-337 at 4 (filed Mar. 1, 2002) ("At this point in time it is premature to make assumptions regarding whether [mobile wireless services] will be viewed as *substitutes* or *complements* to Wireline products.") (emphasis in original).

[49] Wireless Telecommunications Bureau, Wireline Competition Bureau and Consumer & Governmental Affairs Bureau*, Number Portability: Implementation and Progress*, , at 5 (rel. May 13, 2004).

[50] Press Release, Verizon, 2003 Verizon Earnings Conference Call and Investor Conference, Jan. 29, 2004, *available at* investor.verizon.com/news (conference presentation materials only).

[51] Jon Van, *Demand Lacking for Home-to-Cell Phone Number Moves*, CHICAGO TRIBUNE, Dec. 10, 2003, at C1.

Even for second lines, studies of demand cross-elasticity indicate wireless and landline phones are not substitutes.[52]

There are numerous practical reasons for why so few consumers and small businesses are using their wireless phone as a replacement for their wireline phones. Wireless phones can only be used by one individual at a time while wireline connections are used by an entire household or small business. There are many situations where it is advantageous to have more than one person on the phone at the same time.[53] For example, in a small business with multiple employees, landline extensions to each employee are often vital. CMRS phones are also inherently less reliable than wireline phones; CMRS phones run on a finite battery supply and the average wireless consumer has neither a backup battery nor a backup phone if either should fail. Replacing a wireless phone can also be prohibitively expensive. CMRS network coverage, despite improvements, continues to fall short of the wireline network's ubiquity. CMRS phones often have poor reception or are entirely unavailable inside of buildings. Indeed, even a "good quality" cellular call has poorer quality than a typical landline call.[54] In addition, 911 service is

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[52] *See* Phoenix Center for Advanced Legal and Economic Policy Studies, PHOENIX CENTER POLICY BULLETIN NO. 10, FIXED-MOBILE INTERMODAL COMPETITION IN TELECOMMUNICATIONS: FACT OR FICTION, at 9 (2004).

[53] *See* Opposition of AT&T, CC Dkt. No. 04-223, at 18 (filed Aug. 24, 2004). Wireless substitution is limited to young singles who are rarely at home. *See* Comments of WorldCom, Inc., CC Dkt. Nos. 01-338 *et. al.*, at 37 (filed Apr. 5, 2004) ("*WorldCom Comments*").

[54] *See* Richard A. Chandler *et. al.*, THE TECHNOLOGY AND ECONOMICS OF CROSS-PLATFORM COMPETITION IN LOCAL TELECOMMUNICATIONS MARKETS, HAI Consulting, at 38-9 (2002) ("*HAI Study*"), attachment A to *WorldCom Comments.*

not yet fully implemented for wireless phones,[55] and there are inherent, publicized shortcomings in the system[56] that may prevent some consumers from switching.

Similarly, although VoIP[57] holds promise to increase network efficiency and provide an alternative to the circuit-switched network for a small portion of the residential and small business market, that promise is a long way from being realized. As at least one incumbent executive has admitted, VoIP is not likely soon to constitute a viable substitute for the vast majority of circuit-switched consumers. Verizon CFO Doreen Toben recently explained that "[t]he marketing research suggest[s]…[VoIP] is for the 'single geeky guys' who are basically OK having one phone in the house they can use this way….If you have three phones, it doesn't really work."[58] Indeed, Verizon is not "worried about VoIP service cannibalizing traditional wireline offerings, but instead sees the technology as an alternative for…college students, as well as 'win-back' for customers who have switched carriers."[59] Moreover, the incumbents as a group generally admit that VoIP's appeal is limited, estimating that there will only be between

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[55] *See* Mark Rockwell, *E911 Clock is Ticking,* WIRELESS WEEK, Sept. 15, 2004, *available at* http://www.wirelessweek.com/article/CA452844?spacedesc=Departments&stt=000 (indicating that many rural wireless carriers will be unable to meet the upcoming E911 deadlines).

[56] *See* Wayne Rash, *Wireless Carriers Cause Static for Enhanced 911 Service*, eWEEK, Sept. 21, 2004, *available at* http://www.eweek.com/article2/0,1759,1649208,00.asp?kc=EWRSS03119TX1K0000594 (explaining that proprietary differences in carriers' networks and their failure to inform PSAPs of these differences, as well as the inability of GSM networks to employ more accurate GPS location can create delays in emergency response).

[57] Voice over Internet Protocol ("VoIP") as used in this section refers only to VoIP actually carried over the Internet at Voice Grade/DS0 level, a service sometimes referred to as an "Internet phone."

[58] Justin Hyde, *Verizon says Internet Phones a Niche Product*, REUTERS, Jul. 27, 2004, *available at* http://investor.news.com/Engine?Account=cnet&PageName=NEWSREAD&ID=1214380&Ticker=T&SOURCE=N27181390.

[59] Kelley M. Teal, *Verizon Enters VoIP Market*, XCHANGE, Jul. 22, 2004, *available at* http://www.x-xchangemag.com/hotnews/47h22124954.html.

400,000 and 1 million cable VoIP customers by the end of 2004,[60] compared with 172 million who use traditional wireline phones.[61]

Verizon believes that the VoIP market is limited and will not serve as a landline substitute, in part because VoIP services do not, and may not for some time, offer service quality comparable to circuit-switched phone networks. In fact, Verizon has "stopped short of guaranteeing Bell System-level service for VoiceWing [Verizon's VoIP service]."[62] As Bob Ingalls, president of Verizon's retail markets group explained, "[t]here is no VoIP system out there that's going to offer the same quality and reliability of the traditional network."[63] Indeed, although VoIP 911 service is currently possible, it is often unreliable,[64] and the user cannot receive 911 service if he or she changes locations.[65] In addition, unlike a circuit switched phone, the broadband connection which VoIP relies on is not powered by the network, and therefore VoIP service is easily lost during a storm or emergency.

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[60] Report of Bellsouth, Qwest, SBC and Verizon, *Competition in the Provision of Voice Over IP and Other IP-Enabled Services*, WC Dkt. No. 04-36, at Table 2, p. 8 (filed May 28, 2004).

[61] Ben Charney, *Is VoIP Just Chump Change?*, NEWS.COM, Aug. 20, 2004, *available at* news.zdnet.com/2100-9584_22-5318619.html.

[62] Peter J. Howe, *Verizon Rolls out Net-based Phone Service*, BOSTON GLOBE, Jul. 23, 2004, *available at* http://www.boston.com/business/technology/articles/2004/07/23/verizon_rolls_out_net_based_phone_service/.

[63] *Id.*

[64] *See* Ben Smith, *This is an Emergency?: 911 is a Joke for VoIP Consumers*, SLATE, Sept. 8, 2004, *available at* http://www.slate.com/id/2106424/ (explaining that the VoIP 911 "middle-man" Intrado often does not connect the VoIP customer to the PSAP, but rather an administrative operator who may not be able to correctly route the call).

[65] *See id.*

Even if VoIP were a viable replacement for traditional wireline telephony, the addressable market only includes broadband subscribers.[66] In the U.S., "[a]s of December 31, 2003, there were only 26.0 million high-speed lines," which includes both residences and small businesses.[67] By contrast, there were over 105.5 million households in 2000,[68] meaning that, conservatively, only 24.6% of households could even receive VoIP service. The number that will choose to subscribe is actually much lower since, as Verizon noted, multiple-member households (74.2% of all households in 2000[69]) are unlikely to subscribe to VoIP. It should also be noted that cable companies' circuit-switched networks only pass approximately 10 percent of U.S. homes (*Triennial Review Order* ¶ 444), and cable operators have largely halted their circuit-switched buildout because of the huge investments required.[70]

For all of these reasons, there remain no viable alternatives to incumbent LEC copper voice grade loops. Moreover, the Commission's overly broad exemption from unbundling of next-generation incumbent LEC loops leaves copper loops as the only means for competitors to provide broadband to the mass market. Indeed, the Commission expressly relied on the continued availability of copper loops as a means of addressing this problem. *See id.* ¶199.

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[66] *See, e.g.*, Vonage Product Tour, *available at* http://www.vonage.com/products_tour.php. (noting that a broadband connection is required to receive the service).

[67] Industry Analysis and Technology Division, Wireline Competition Bureau, *High Speed Services For Internet Access: Status as of December 31, 2003*, at 3 (rel. June 8, 2004).

[68] *See* Tavia Simmons & Grace O'Neill, HOUSEHOLDS AND FAMILIES 2000, UNITED STATES CENSUS BUREAU, CENSUS 2000 BRIEFS, at 2 (rel. Sept. 2001), *available at* http://www.census.gov/prod/2001pubs/c2kbr01-8.pdf.

[69] *See id.*

[70] *See, e.g.,* Ben Charney, *Cox: VoIP Ready for Prime Time*, NEWS.COM, *available at* http://news.com.com/Cox+VoIP+ready+for+prime+time/2100-7352_3-5215211.html (discussing how Cox will, by 2005, use only VoIP for phone network expansion and forgo additional "more expensive" circuit switched investments).

Thus, whatever "balance" (skewed as it is against competition) the *Triennial Review Order* achieved in the mass market loop analysis can only be sustained if the Commission continues to make copper loops available. Indeed, as mentioned, the D.C. Circuit's analysis of the role of the broadband exemption in the Commission's application of the impairment standard suggests that the Commission would be justified in retaining copper loop unbundling on a national basis even if there were isolated markets in which competitors might not be impaired without such loops. That is exactly what the Commission must do.

B. Subloops, Inside Wire, And NIDs Should Be Subject To A National Finding Of Impairment.

Subloops, inside wires owned by incumbent LECs and network interface devices are the ultimate bottleneck facilities for which the sunk costs of deployment are substantial and for which the incumbent LECs, with their privileged access to buildings both before and after the enactment of the 1996 Act, have enormous first-mover advantages. Indeed, as the Commission found in the *Triennial Review Order*, without access to subloops, including stand-alone inside wire network elements in multi-unit premises, competitors would not be able to serve customers in many situations. *See Triennial Review Order* ¶¶ 348-349. In addition, as the Commission also found in the *Triennial Review Order*, in cases where customer premises wire is not part of the incumbent LEC's network (*i.e.*, it is not part of the inside wire subloop), "the NID may be the sole means of accessing this customer premises wire." *Id.* ¶ 351. Based on these findings, the Commission found that competitors are impaired on a national basis without access to subloops (*see id.* ¶ 347), inside wire and NID unbundled network elements. *See id.* ¶ 351.

The incumbents did not oppose this decision during the *Triennial Review Order* proceeding, they did not challenge the Commission's ultimate national impairment findings for these elements before the D.C. Circuit, and the D.C. Circuit therefore did not question the

reasonableness of the impairment findings. Nor would there be any basis for changing these decisions in the current proceeding. The Commission should therefore retain subloops, inside wire and NIDs as unbundled elements on a national basis.

C. Line Sharing

The Commission should promptly reinstate line sharing.[71] No carrier can duplicate the nationwide incumbent loop plant, it follows that no carrier can duplicate the upper frequencies of the loop plant. What the Commission previously concluded therefore remains true on the record created here: "[t]here can be little dispute that requesting carriers have not duplicated the incumbent LEC's ubiquitous loop plant, and generally are not providing service with competitive loop facilities."[72] As the Commission explained, "carriers seeking to deploy voice-compatible xDSL-based services cannot self-provision loops." *Id.* ¶37. The high frequency portion of the loop is subject to the same fixed costs and economies of scale as the loop as a whole. The Commission so concluded in the *Triennial Review Order* itself, finding that "requesting carriers are generally impaired on a national basis without access to incumbent LECs' local loops, *whether they seek to provide narrowband or broadband services,* or both." *Triennial Review Order* ¶ 248 (emphasis added).

Several ALTS members utilize line sharing to provide broadband services to underserved – or in some cases, previously unserved – areas of the country. For example, Great Works Internet ("GWI"), Maine's oldest and largest Internet provider, has collocated DSL equipment

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[71] *See Petition for Reconsideration of Earthlink,* CC Docket No. 01-338 *et. al.* (Oct. 2, 2003).

[72] *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket NO. 96-98, 14 FCC Rcd 20912, ¶ 43. (1999).

throughout the state of Maine, and launched DSL services to Maine consumers and small businesses long before Verizon. In New Hampshire and Vermont, ALTS member company segTel uses line sharing to deploy facilities-based DSL services for consumers in that largely rural state. Indeed, for rural states like Maine, New Hampshire, and Vermont, line sharing is vitally important. Accordingly, unless the Commission wishes to redline the nation – ensuring broadband services are only available to consumers and small businesses in major urban areas – it must reinstate line sharing.

In short, line sharing still presents the only alternative for facilities-based competitors. Competitors could try to lease the entire loop and use that to provide only DSL service, while the incumbent LECs use the same loop to provide both broadband and voice service, but such an entry strategy is simply inefficient. Thus, the Commission has held that "[i]t is not economical for competitive LECs to self-provision or purchase the entire loop as a second line just to obtain access to the high frequency portion of the loop." *Id*. ¶ 14. at Indeed, broadband competitors that entered the market prior to the line sharing requirement generally failed.

Instead, broadband competition using the entire loop is possible, if at all, only if the competitor is able to provide both voice and data services over that loop. But while some customers today are willing to migrate away from an incumbent LEC to obtain voice services, most are not. Customers' longstanding familiarity with the ILEC makes them reluctant to switch to a new voice carrier. *Cf. id.* ¶ 48. Because consumers today are unable to purchase ILEC retail DSL services without also purchasing the retail voice service from the ILEC, the Commission's line sharing rules provide consumers the only means of subscribing to residential voice and data services provided by different carriers over a single line. Notably, since the Commission rescinded its line sharing rules, ILECs have been able to tie purchase of ILEC DSL to purchase

of ILEC voice service unchecked by competitive entry, thus ensuring that the ILECs can leverage their near-stranglehold over the voice market into control of the DSL sector. Unbundling line-shared loops, on the other hand, enables competitors to offer DSL to consumers who may want to keep the ILEC voice service, but choose another company for DSL. More customers are willing to try new competitors for DSL service than for voice service because broadband services are relatively new.

In the *Triennial Review Order*, the Commission concluded that line sharing was no longer necessary, because data CLECs could supposedly team up with UNE-P providers and jointly offer consumers a bundle of voice and data services. *See Triennial Review Order* ¶ 259. Line splitting was to make line sharing unnecessary. Even at the time the Commission made this finding, however, it was not supported by anything on the record. Since voice CLECs never controlled more than about 5% of the market, line splitting would have left 95% of the market unaddressed for broadband.[73] Moreover the Commission ignored detailed evidence that the ILECs never have made available workable OSS for line splitting, and to the contrary had made line splitting as a practical matter unavailable.[74]

The Commission's decision to eliminate line sharing on the basis of the availability of line splitting is now completely unsupported. Today, major UNE-P providers such as AT&T have abandoned UNE-P and the narrowband consumer market, and other major UNE-P

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[73] *See Choice Coalition Emergency Petition for Stay* at 20 & n.41.

[74] *Id.* at pp. 31-35 and Attachments A-F.

providers appear to be on the verge of doing likewise.[75] Moreover, the D.C. Circuit reversed and vacated the Commission's UNE-P regulations that were the regulatory predicate for the FCC's elimination of line sharing. Thus, even assuming that there was ever a rational basis for concluding that the "availability" of line splitting justified the elimination of line sharing, no such basis exists today.

In this regard, it is important to emphasize the role line sharing has played in the development of competition for mass market broadband services. Before line sharing, the ILECs were far too concerned about cannibalizing their own highly profitable T-1, ISDN and second line businesses to offer consumer DSL-based services. It cannot be disputed that the availability of competitive xDSL offerings in reliance on line sharing have contributed substantially to the incumbents' subsequent willingess to aggressively market inexpensive price reductions in their xDSL service.

Today, line sharing is the most practical and reliable method of providing a transition from narrowband voice telephone to VoIP-based broadband telephony. And now that other forms of competitive residential voice service are apparently being phased out, competitive VoIP services may be the only hope for residential competition. Thus line sharing is the best way to preserve that residential competition.

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[75] *See* "AT&T Announces Second-Quarter 2004 Earnings, Company to Stop Investing in Traditional Consumer Services; Concentrate Efforts on Business Markets," News Release, July 22, 2004, available at http://www.att.com/news/item/0,1847,13163,00.html; "MCI Hires Advisors for Likely Sale Bid," Washington Post [business section], page E01, Sept. 21, 2004 (available at http://www.washingtonpost.com/wp-dyn/articles/A36879-2004Sep20.html). *See also* "Z-Tel Announces Second Quarter Financial Results," Press Release, Aug. 9, 2004, available at http://www.corporate-ir.net/ireye/ir_site.zhtml?ticker=ztel&script=410&layout=-6&item_id=602427.

VoIP is new technology, and many consumers will not be comfortable abruptly abandoning their traditional POTS services. As explained, VoIP is being embraced primarily by the small percentage of "early adopter" consumers who are eager to try out new technology. For VoIP to reach critical mass, a transition is required. Line sharing provides that transition. Through line sharing consumers can retain their traditional POTS service while they try out VoIP service as a second line service. When they become comfortable with VoIP services, they can then convert exclusively to broadband service.

Line sharing also is not dependent upon hot cuts, and so largely overcomes the severe operational problems that now exist as a result of the ILECs' failure to implement a practical hot cut process. Moreover, when the customer becomes comfortable with the VoIP service, she can port her narrowband number to her VoIP service (if she chooses), and simply discontinue narrowband service once the number has ported.

In contrast, without line sharing, the transition to facilities-based competitive residential VoIP services will become far more uncertain. An effective hot cut process would have to be created. Customers who initially wished to retain their ILEC narrowband voice service would not likely be able to chose among competitive carriers for broadband services, since without line sharing it would not be possible for competitors to survive in the mass markets as stand-alone data carriers. Moreover, as indicated, the ILECs would have absolutely no incentive to migrate their narrowband voice customers onto a broadband VoIP network. So VoIP deployment would depend on regulators' ability to require the ILECs to develop and implement hot cut processes that (once implemented) would greatly devalue their networks. That will be no easy task. And VoIP deployment would proceed, if at all, in spite of the ILECs, and not because of them.

In sum, line sharing could well do for VoIP what it did for consumer DSL services – give a competitive jump start. It can become an essential transitional mechanism towards competitive facilities-based broadband voice services, and the existence of such services is critical to the continued development and deployment of broadband. None of this was clear at the time the Commission decided to eliminate line sharing. For this reason as well, that is a decision that should be reconsidered.

Finally, nothing in the *USTA* decisions prevents the Commission from reinstituting line sharing. The *USTA I* court initially reversed and remanded the Commission's line sharing decision because the Commission failed to consider intermodal alternatives. But there is at most one intermodal alternative – cable modem service that is available to some, but not all, of the residential consumers who could purchase competitive DSL-based services. And cable modem service is available to few enterprise customers. Moreover, the availability of a single intermodal competitor that has no intention of making its facilities available at wholesale to competitors cannot be deemed to satisfy the impairment standard. *See Triennial Review Order* ¶ 98.

Notably, in the *Triennial Review Order,* the Commission in fact failed to engage in inquiry required by the *USTA I* court – it did not review intermodal alternatives to conclude whether or not they rendered line sharing unnecessary. Instead, in the *Triennial Review Order,* the Commission relied on the various predictive judgments described above, concerning UNE-P competition, line splitting, and the likelihood that voluntary commercial agreements would make regulation unnecessary. The *USTA II* court deferred to the FCC's analysis of the evidence before it without engaging in any substantive review of the FCC's decision. As discussed above, the FCC's judgments in eliminating line sharing have not proved out, and new evidence to the

contrary has been offered to the Commission. Obviously, then, the *USTA II* decision does not prevent the FCC from changing course when it concludes that its previous judgments have not proved out and there is new, contrary evidence before it.

D. DS1 Loops Should Be Subject To A Nationwide Finding Of Impairment.

The Commission's analysis in the *Triennial Review Order* of DS1 loop impairment resembled its assessment of mass market and DS0/voice grade loops. On the one hand, the Commission extended its unbundling exemption to the packetized capabilities of hybrid fiber-copper loops, at least in the mass market. On the other hand, the Commission established a national presumption of impairment for DS1 loops, even where provided via hybrid loops. The national presumption could be rebutted only where the wholesale trigger, administered by the states, was met for a particular location.

Before addressing the question of DS1 impairment, it is important to emphasize that, to the extent that the *Triennial Review Order* can be read to exempt the packetized capabilities of hybrid loops from unbundling in the enterprise market,[76] that approach is incoherent and likely to be extremely destructive to competition in the small business market. When the Commission considered the extent to which hybrid loops should be unbundled in the *Triennial Review Order*, it did so solely in the context of its examination of the mass market. In that context, the Commission could at least rely on the presence of cable modem services, a robust intermodal competitor, as a check on the harmful consequences of eliminating mass market broadband loops. *See id.* ¶ 292. Whatever the merits of this approach may be, it cannot be rationally

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[76] It should be noted that this interpretation is contradicted by the Commission's statement in footnote 956 of the *Triennnial Review Orde*r that the hybrid loop exemption applies only to mass market customers. *See id.* n. 965.

extended to the market for business customers that demand DS1-type services. The Commission itself found in the *Triennial Review Order* that cable operators do not generally even attempt to serve this market. *See id.* ¶ 52. As explained below, it is unquestionably still the case that neither cable nor any other intermodal competitor offers any significant discipline on incumbent LECs in the provision of DS1-type services. Nor are the other purported rationales for eliminating unbundling for the packetized capabilities of hybrid loops even close to adequate to protect competitors or consumers from incumbent LEC abuse of market power.[77]

Accordingly, in the instant proceeding, the Commission should clarify that its unbundling exemption for hybrid loops applies solely to the residential mass market. Competitors seeking to use packetized capabilities to serve small and medium enterprise customers that demand DS1-type and successor services should be able to purchase unbundled packetized loops over hybrid facilities to serve those customers.

In any event, it is clear that the Commission was justified in concluding that competitors are presumed impaired on a national basis without access to unbundled DS1 loops. The Commission cited to abundant evidence in the *Triennial Review Order* in support of this conclusion. The Commission found that DS1 loops, like all loops, are characterized by

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[77] As discussed, the Commission relied on the continued availability of DS1 and DS3 loops as a means of addressing competitors' impairment in the absence of packetized loops. *See id*. ¶ 291. But of course, reliance on these facilities simply forces competitors to rely on increasingly obsolete and less efficient end user connections and cannot therefore address competitors' impairment when they are denied access to packetized loop capabilities. Moreover, the Commission also relied on the availability of copper subloops (running from a remote terminal to the customer premises) as a means of addressing competitors' impairment based on the assumption that competitors could construct fiber to the remote terminal to which the subloops are connected. *See id.* But the Commission offered no evidence, based on market activity or otherwise, that there is even a remote possibility that it would be economic for competitors to make the enormous sunk investment in feeder distribution plant in *all markets* served by hybrid loops, that, even if they could, there would be any room in remote terminals to collocate equipment needed to connect to ILEC subloops, or that only making copper subloops available for the business market was consistent with the Commission's conclusion that competitors are presumed impaired on a national basis for even DS3 loops.

"extremely high economic and operational barriers." *Id.* ¶ 325. At the same time, the "revenues generated from small and medium enterprise customers are not sufficient to make self-deploying DS1 loops economically feasible from a cost recovery perspective." *Id.* ¶ 326. Thus, competitors simply "do not have the ability to recover the sunk costs in self-deploying DS1 loops." *Id.* Moreover, the incumbent LECs' enormous first-mover advantages (preferential access to rights-of-way and to buildings as well as customers' reluctance to incur the inconvenience of switching carriers) "impact the ability to self-deploy at a DS1 level to an even greater extent than at higher loop capacity levels." *Id.*

Consistent with this analysis, the Commission found "little evidence" that competitors have the "ability" to self-deploy DS1 loops, and it found "scant evidence of wholesale alternatives for serving customers at the DS1 level." *Id.* ¶ 325. Nevertheless, notwithstanding the limited evidence of DS1 loops offered at wholesale, as mentioned, the Commission applied the wholesale triggers to DS1 loops. It did so based on its conclusion that the available evidence "suggests that there may be specific locations" where DS1 loops are available at wholesale. *Id.* ¶ 327.

The available evidence since the release of the *Triennial Review Order* confirms that there are virtually no locations in the country in which non-incumbent LECs have self-deployed or would self-deploy DS1 loops. The market evidence demonstrates that the competitors in the real world cannot deploy DS1 loops.[78] For example, in a recent survey conducted by the Ad Hoc User's Committee, purchasers of high-capacity services were asked whether "viable competitive alternatives" for DS1 service were available at " (a) fewer than 10 percent of the service

[78] *See Shanahan Dec*. ¶¶ 13-16*; See Evans Dec.* ¶¶ 14-19.

locations, (b) between 10 percent and 25 percent of the service locations, (c) between 25 percent and 50 percent of the service locations, or (d) more than 50 percent of the service locations."[79] The respondents indicated that competitive DS1 service (from a single provider) is available at fewer than ten percent of the service locations. *See ETI Study* at 21.[80]

In fact, the actual percentage of locations served by just one viable non-incumbent LEC DS1 service offering is likely very close to zero.[81] For example, the Commission estimates that only between 3 and 5 percent of the commercial buildings in the country are served by at least one competitive fiber end user connection. *See Triennial Review Order* n.856. Ad Hoc estimates that the number is in fact only 2 percent. *See ETI Study* at 16. Most of these buildings are characterized by very large demand (at the OCn level). Given the relatively limited revenue opportunity associated with DS1 loops, it is likely that competitors offer DS1 service in only a tiny percentage of the few buildings served by competitor fiber. The number of buildings served by multiple DS1 competitors is probably de minimis.

Nor are there viable intermodal competitors for the provision of DS1-type services.[82] Although it may be a substitute for ADSL, the service characteristics and limited deployment of cable modem service prevent it from being a viable competitor with or replacement for DS-1 loops for any but the smallest business customers. As the Commission recently confirmed:

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[79] *See* Lee L. Selwyn, *et. al*., COMPETITION IN ACCESS MARKETS: REALITY OR ILLUSION, A PROPOSAL FOR REGULATING UNCERTAIN MARKETS, Economics and Technology, Inc. (Aug. 2004) ("*ETI Study*"), prepared for and filed by Ad Hoc Telecommunications Users Committee, CC Dkt. Nos. 01-338 *et. al.,* (filed Aug. 26, 2004).

[80] This study was originally conducted in 2001, but a survey of the businesses in question confirmed that the data remain accurate. *See ETI Study* at 21.

[81] *See Shanahan Dec*. ¶¶ 22-60 (describing lack of small business DS1 offering alternatives in Conversant territory).

[82] *See Evans Dec*. ¶17 (cable not an alternative for small businesses), *id.* ¶ 18 (wireless not a substitute).

"[c]able modem service is primarily residential service, but may also include some small business service."[83]

Businesses' decision not to adopt cable modem service is the result of several factors. As Verizon admits, only "25% of businesses already have a cable drop"[84] and many downtown areas where large businesses are located are outside of cable's network footprint.[85] Further large-scale expansion of cable networks, especially to areas of dense business concentration, is unlikely from an economic standpoint,[86] in part because cable companies would face the some of the same building access and right of way issues that have plagued other competitors.

Additionally, the inherently limited upstream capacity[87] of cable modem service, hybrid fiber coax's ("HFC") shared architecture that can lead to service slowdowns and security

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[83] *Availability of Advanced Telecommunications Capability in the United States,* Fourth Report to Congress, FCC 04-208, at 14 (rel. Sept. 9, 2004). In June 2002, cable companies "provided[d] fewer than 16,000 coaxial cable connections to medium and large businesses." *See Triennial Review Order* n.128.

[84] Letter of Dee May, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 01-337 *et. al.*, at 12 (filed Nov. 13, 2003) (internal cites omitted). As Verizon notes, of all business segments, cable infrastructure is closest to small businesses, (*see id.*) placing even less than 25% of the larger business market within the reach of cable networks.

[85] "[C]able companies have remained focused on the mass market, largely residential service consistent with their historic residential network footprints, and bundling telephone service with cable modem services." *Triennial Review Order* ¶ 52. Cable networks, with the exception of local shopping areas interspersed within or adjacent to residential neighborhoods, do not pass most business locations. *See ETI Study* at 23.

[86] Since businesses generally do not purchase video services, cable companies would lose a large portion of their revenue stream that they normally use to justify expansions of its two-way capable networks. *See* Letter from David L. Lawson, AT&T to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.,* at 7 (filed May 26 2004) ("*AT&T May 26 Letter*")

[87] Because of the manner in which they were constructed, the bandwidth efficiency in cable networks' upstream path is much lower than the downstream path. *See HAI Study* at 35. Offering services similar to a symmetrical T-1 would "quickly exhaust the upstream capacity of even an upgraded cable network." *Id.* at 36. The importance of symmetrical service to business users is underlined by Conversent, who notes that business customers are willing to pay 3 times more for Conversent symmetrical DSL service than Verizon's ADSL offering. *See* Reply Comments of Conversent Communications LLC, CC Dkt. Nos. 01-338 *et. al.,* ex. 1, Declaration of Robert J. Shanahan, ¶ 17 (Jul. 17, 2002).

concerns,[88] and the absence of other features demanded by most business customers make cable modem service unsuitable for the business market.[89] In fact, cable modem adoption among even small businesses has dropped recently in part because of the asymmetric nature of service.[90] What is more, 75 percent of businesses subscribing to cable modem service receive the residential version,[91] demonstrating that either the alleged "business centric" features of the business product are not compelling or have not been deployed.

Cable companies' own marketing materials reinforce the notion that HFC offerings are only suitable for the smallest of business customers. Lightpath's (Cablevision's CLEC affiliate) service for "home-based and small businesses," is provided "via Cablevision's hybrid fiber coax (HFC) network."[92] It is clear that the 3.5MB downstream/384k upstream service would only be appropriate for the smallest of businesses with relatively unsophisticated needs.[93] Time Warner Cable ("TWC") and Cox have similar HFC products aimed at a similar market. For "businesses

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[88] *See* James Michael Steward, *Facing the security risks of cable modems*, TECHREPUBLIC, July 8, 2002, *available at* http://insight.zdnet.co.uk/hardware/servers/0,39020445,2118716,00.htm.

[89] *See Triennial Review Order* ¶ 129 ("Large enterprises demand extensive, sophisticated packages of services. Reliability of service is essential to these customers, and they often expect guarantees of service quality. The services they might purchase include an internal voice and data network, local, long distance, and international POTS service to one or multiple locations, provisioning and maintenance of a data network such as ATM, frame relay or X.25, and customized billing.").

[90] The Yankee Group projected cable modem would surpass DSL in the small business segment by year-end 2003. However, cable modem penetration dropped precipitously in the small business market, or businesses with between 20 and 99 people. Cable operators also achieved limited success in the remote office market, reaching only 4.2% of that market in 2003. *See AT&T May 26 Letter* at 7. The Yankee Group acknowledged that "its earlier predictions of penetration failed to account for the reluctance of businesses to purchase cable modem services because they are viewed as less secure and because cable does not offer 'symmetrical' services." *See id.*

[91] *See* Letter of David L. Lawson, AT&T to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338, *et. al.,* at 4-5 (filed Feb. 4, 2003).

[92] http://www.lightpath.net/Interior98.html.

[93] *See id.*

with 1-5 employees," and "Small and medium sized Businesses," (at least those with relatively unsophisticated telecommunications needs) TWC offers a 4MB/2MB HFC product.[94] Similarly, Cox Business Services describes its network as "a local HFC network [] interconnected via a high speed ATM backbone,"[95] delivering 3.2MB/128k.[96] Because HFC networks are shared, Cox and Comcast (with its 4MB/384k HFC offering for "small business"[97]) place bandwidth limitations on their business users.[98] This kind of use restriction would be unacceptable to most business customers who require a predicable and stable level of bandwidth.

It is also clear that no non-incumbent LEC wholesale sources of DS1 loops exist or are likely to develop in the vast majority of locations in the country. Tellingly, neither Verizon nor Qwest even attempted to demonstrate that the DS1 wholesale trigger was met for any of the buildings in their markets after the *Triennial Review Order*.

It appears that Verizon and Qwest made the correct choice. Any attempt to demonstrate widespread compliance with the DS1 trigger would have been futile, as is illustrated by the states in which incumbent LECs did attempt to meet the triggers. For example, according to a study conducted by QSI Consulting of the data submitted in state *Triennial Review Order*

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[94] *See* http://rrbiz.com/RoadRunner/sec_unformatted.asp?TRACKID=&CID=24&DID=29.

[95] http://www.coxbusiness.com/welcome_kit/18888FAQInternet.pdf.

[96] *See* http://www.coxbusiness.com/welcome_kit/18888Facts.pdf.

[97] *See* http://work.comcast.net/smallbusiness.asp.

[98] *See* http://www.coxbusiness.com/AccetableUsePolicy.pdf at 1. Cox Business Services' "Acceptable Use Policies" indicates that the "Customer may not use the Services in a manner that places a disproportionate burden on the network or impairs the Service received by other Customers." Comcast notes in its "High-Speed Internet for Business Acceptable Use Policy," that "You must ensure that your activity… does not improperly restrict, inhibit, or degrade any other user's use of the Service, nor represent (in the sole judgment of Comcast), an unusually large burden on the network." http://work.comcast.net/legal/aup.asp.

implementation proceedings, the DS1 wholesale trigger was met for only 36 buildings in the 12 states[99] for which QSI was able to obtain data. *See id.* at 3. This is obviously a tiny percentage of the overall DS1 demand in the states in question. This is especially striking since the states in question include Chicago, Illinois, the third largest MSA in the country, Dallas and Houston, Texas, the fifth and eighth largest MSAs respectively, Miami, Florida, the sixth largest MSA, and Detroit Michigan, the ninth largest MSA in the country. If five of the top MSAs in the country contain fewer than 40 locations at which DS1 loops are made available at wholesale, there is simply no basis for the Commission to continue to apply a wholesale trigger for DS1 loops.

More generally, the across-the-board increases in the incumbents' DS1 special access rates further confirm the point that there is essentially no competitive entry in the provision of these services. For example, Qwest has increased the rate for 10 mile DS1 special access service from a price cap rate of $410 two years ago to $610 under its recently filed tariff, an increase of 47 percent.[100] Even in the densest areas with the most competition, DS1 rates have continued their upward march. Since pricing flexibility was granted, Verizon's DS1 rates have increased

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[99] Those states are as follows: Illinois, Indiana, Michigan, Ohio, Wisconsin, California, Texas, Missouri, Oklahoma, Florida, Georgia and Tennessee. *See* Gary Ball, *et al.*, ANALYSIS OF STATE SPECIFIC LOOPS AND TRANSPORT DATA, QSI Consulting, at 10, ("*QSI Report*") attached to joint *ex parte* of ALTS *et. al.,* CC Dkt. 04-313 *et. al.,* (filed Oct. 4, 2004).

[100] *See ex parte* presentation of the Ad Hoc Telecommunications User's Committee, CC Dkt. No. 01-338 at 1 (filed Sept 13. 2004).

by 10 percent in Manhattan,[101] and Qwest's recent tariff change resulted in a 24.75 percent increase in the price of DS-1 channel terminations in "zone 1."[102]

All of this demonstrates that the Commission was absolutely correct in concluding in the *Triennial Review Order* that there is no significant evidence of self-provisioning for DS1 loops and "little evidence" of wholesaling DS1 loops. In fact, there is so little evidence of wholesaling for DS1 loops that the administrative costs associated with identifying the isolated locations where there is such activity far outweigh any benefits in terms of improved consumer welfare.

The case for a conclusive national impairment finding for DS1 loops is especially strong if the Commission insists on continuing to apply its overbroad unbundling exemption to the packetized capabilities of hybrid loops in the small and medium enterprise market. Indeed, as with copper loops, the Commission expressly relied on the continued availability of DS1 loops as a means of reducing the harmful consequences of its unbundling exemption. *See Triennial Review Order* ¶ 291. Moreover, any "costs" associated with unbundling DS1 loops even in the isolated circumstances in which competitors are unimpaired would be extremely small given that DS1 loops utilize legacy technology, thus minimizing any foregone incumbent innovation or investment. The Commission should therefore conclude that competitors are impaired on a national basis without access to unbundled DS1 loops.

E. DS3 Loops Should Be Subject To A Nationwide Finding Of Impairment Or At The Very Least A National Presumption Of Impairment.

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[101] *See* Comments of the Ad Hoc Telecommunications Users Committee, CC Dkt. Nos. 01-321 *et. al.,* at 6. (filed Jan. 22, 2002).

[102] *TWTC Tariff Petition* at 9.

As with DS1 loops, the Commission required that DS3 loops be unbundled based on the entry barriers faced by competitors seeking to deploy those loops as well as because continued availability of DS3 loops diminished somewhat the harmful consequences of the Commission's overbroad unbundling exemption for next generation loops. The impairment analysis for DS3 loops would be extremely powerful regardless of whether the Commission retains the exemption for next generation loops. But the case is unimpeachable if that exemption is retained.

In the *Triennial Review Order*, the Commission concluded that DS3 loops are characterized by the same "significant fixed and sunk construction costs" and additional barriers associated with incumbent LEC first mover advantages that prevent competitors from deploying DS1 loops. *See id.* ¶ 320. Moreover, the Commission concluded that "a single DS3 loop, generally, can not provide a sufficient revenue opportunity to overcome these barriers." *Id.* The Commission did recognize, however, that competitors "have been able to overcome these barriers when providing multiple DS3s to a specific customer location," and it found that there existed some evidence of wholesale offerings of DS3 loops by non-incumbent LECs. *See id.* ¶ 321. The Commission therefore established a national presumption of impairment for DS3 loops to be rebutted in particular locations where either two self-provisioners or wholesalers of DS3 loops are present. Importantly, the Commission also concluded that competitors could only self-deploy loops where customer demand reaches at least three DS3s of capacity. The Commission therefore established a cap of two DS3s per carrier for each customer location. *See id.* ¶ 324.

The available evidence demonstrates that the Commission's assessment of DS3 impairment was essentially sound, although it overstated the extent to which non-incumbent LECs have or could deploy DS3 loops. To begin with, as the incumbents themselves argue, demand for high-capacity loops is concentrated in a relatively small number of wire centers in

the largest urban markets where competitors can connect loops to their own fiber transport facilities.[103] In recent filings, SBC and Verizon have argued strenuously that the demand for high capacity services is highly concentrated. In fact, all but three of the 42 markets for which SBC and Verizon supply data regarding competitive entry are in the top 50 MSAs.[104] According to the incumbents themselves, therefore, there is a basis for limiting any impairment analysis for high-capacity circuits to the top 50 MSAs. Outside of those top MSAs, competitors should be deemed conclusively impaired because they cannot justify the enormous sunk investment in transport facilities that are a prerequisite for self-provisioning DS3 loops to large commercial customers.

But even within the top 50 MSAs, it appears that there is only a tiny number of locations to which competitors have self-deployed DS3 loops or made such loops available at wholesale. For example, as with DS1 loops, neither Verizon nor Qwest even attempted to demonstrate compliance with the DS3 impairment triggers in state implementation proceedings. This again reflects their judgment that competitor deployment of these facilities was not significant enough to bother litigating the issue. Moreover, the QSI Report indicates that, in the 12 states in which impairment data was examined, only 130 buildings satisfy the self provisioning trigger and only 49 buildings meet the wholesale trigger for DS3 loops. *See QSI Report* at 2-3.

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[103] *See ex parte* Letter of Christopher M. Heimann, SBC, to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.*, at 2 (filed Aug. 18, 2004) ("*SBC August 18 Letter*"); *Verizon July 2 ex parte* (80 percent of demand for special access in Verizon territory is concentrated in 8 percent of its wire centers).

[104] *See SBC August 18 Letter* at n.5 (listing the 22 MSAs addressed); *Verizon July 2 ex parte* at 1 (noting that the *ex parte* includes data on 20 MSA's) The Bridgeport-Stamford-Norwalk-Danbury market is the only market outside the top 50 MSAs for which the incumbents have submitted data. *See also* Letter of R. Steven Davis, Qwest, to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338 *et. al.* (filed Aug. 20, 2004) (submitting data for Denver).

None of this is remotely surprising in light of the real world entry barriers associated with providing DS3 loops. As explained, the available evidence indicates that buildings with *at least one* competitor fiber loop comprise only a tiny fraction of the commercial buildings (roughly 2-5 percent) in the country. The number of buildings served by *multiple* fiber loops deployed by competitors is likely much smaller. In addition, those fiber loops are generally deployed for the purpose of serving customers with multiple DS3s worth of demand. Competitors rarely self-provision loops to serve only a single DS3 worth of demand. Moreover, competitors generally serve commercial buildings using optical SONET ring technology. In order to offer stand-alone DS3 circuits to wholesalers or to other occupants of multi-unit buildings, carriers using SONET technology must deploy equipment that allows them to channelize digital circuits over optical facilities. That investment constitutes a significant entry barrier even in those buildings where a carrier has deployed its own fiber.

Furthermore, the fact that a carrier has obtained building access needed to serve a single large customer in a particular multi-unit building in no way means that the carrier could extend its facilities within the building to serve a different customer within the building that, for example, demands only a one or two DS3s worth of capacity. As numerous parties have explained in the past, many building owners only grant requesting carriers access to a particular floor within a building and make it essentially impossible to serve other customers on different floors in the same building. In fact, most CLEC loop facilities are restricted to these "fiber-to-the-floor" arrangements.[105]

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[105] *See ex parte* presentation of El Paso Networks, LLC and Conversent Communications LLC, CC Dkt. Nos. 01-338 *et. al.,* at 18 (filed on Nov. 26, 2002) ("*El Paso/Conversent ex parte*"). A majority of Worldcom's 6,000

Based on the available evidence, the Commission would be completely justified in adopting a conclusive finding of impairment throughout the country for DS3 loops. As the D.C. Circuit acknowledged, a sensible definition of the relevant market will inevitably include a certain number of false negatives or positives. *See USTA II* at 575. Given the tiny number of known buildings in which DS3 circuits are served by non-incumbent LECs and the high entry barriers associated with providing DS3s even in those buildings where carriers have deployed their own fiber to provide OCn service, it seems likely that a national finding of impairment will be no more or less accurate than an attempt to identify the specific buildings where non-incumbents can provide DS3s. Furthermore, the consequences of any false negatives (buildings on which DS3s are unbundled but for which there is no impairment) would be minimized by the cap of two DS3s established in the *Triennial Review Order* and by the fact that DS3 utilize older, legacy technology.

But if the Commission were nevertheless to conclude that competitors might be unimpaired in a significant number of locations in the absence of unbundled DS3 loops, it must continue to assess such impairment based solely on *actual deployment* of facilities in particular customer locations. It is simply not enough to rely on proxies for such deployment, as the incumbents have done in submitting maps that purport to track competitors' fiber deployment.[106] Impairment for self-deployed loops must be assessed separately for each end user location

serviced buildings were also "fiber-to-the-floor" arrangements. *See* Eric Krapf, *What is the Future of Worldcom's Fiber*, BUSINESS COMMUNICATIONS REVIEW, Aug. 2002, *available at* http://www.bcr.com/bcrmag/2002/08/p20.php.

[106] *See* attachments accompanying Letter of Joseph Mulieri, Verizon to Marlene H. Dortch, Secretary, FCC, RM-10593 (filed Jul. 13, 2004); attachments accompanying *Verizon July 2 ex parte presentation*.

because it is impossible to predict whether a particular entry barrier will be significant or not at any particular location.

For example, to the extent that a competitor deploys its own fiber to provision DS3 loops, it faces very different entry barriers across different urban markets and within the same urban market depending on time and location. Entry barriers generally vary from one city to another because municipal policies regarding access to public rights-of-way differ substantially. In fact, access to public rights-of-way in any given city can change dramatically over time due to the establishment of moratoria, changes in municipal fees, and procedures for review of permits. But even where a carrier is able to obtain access to public rights-of-way, there is often no conduit space available for competitors. The record indicates that fiber construction increases approximately ten times when a carrier must deploy its own conduit rather than pull fiber through existing conduit.[107] More generally, as the Bates-White Report explains, the costs of deploying fiber varies significantly depending on whether a firm must deploy new underground installations, use poles or use existing conduit. *See Bates-White* at 40. Costs also vary significantly depending on whether the location is in an urban or suburban area. *Id*. In addition, there is sometimes no available space to collocate equipment in incumbent LEC central offices.

Even where all of these problems can be overcome, competitors face entry barriers, each one of which can by itself prevent fiber loop deployment and each one of which varies from customer location to customer location. Specifically, a competitor can only build its own loop facilities to an end user if it can obtain building access on reasonable terms and conditions and if the customer is willing to tolerate the disruption and delay associated with loop construction.

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[107] *See El Paso/Conversent ex part*e at 14-15.

But each building owner establishes its own building access policy and each end user customer decides the extent to which it will tolerate delay and disruption. These two issues prevent loop deployment in a very large number of situations. The extent of these relevant entry barriers must accordingly be examined on a location-by-location basis. In fact the only way the Commission can be confident that the entry barriers can be cleared for a particular location is if non-incumbents have in fact succeeded in doing so.

Of course, in light of the *USTA II* decision, the Commission must itself administer any trigger designed to identify the customer locations for which competitors are unimpaired without DS3 loops. This is probably most effectively addressed if the Commission requires all carriers to file annual reports identifying the locations at which they have self-provisioned DS3s or made them available at wholesale. Where two or more carriers have deployed their own DS3 loops to a particular location, DS3 loops would be eliminated as a UNE for the location in question. If the Commission applies similar triggers to dark fiber (discussed below), dark fiber loops would be eliminated for those locations in which competitors use their own fiber to provide the DS3s. Where one or both of the DS3 providers uses dark fiber loops, only the lit DS3 element would be eliminated and dark fiber loops would continue to be available. The Commission should review the reports provided by competitors and release tentative findings that specified locations would no longer be subject to DS3 unbundling. Private parties should then be given the opportunity to comment on the tentative conclusions (for example by explaining that a purported wholesaler does not in fact make DS3 circuits available at wholesale). After reviewing the comments, the Commission would simply release an order listing the customer locations that are no longer subject to DS3 unbundling. The administrative burden of this process, while needless as

discussed above, could be bearable because, as explained, there are not very many buildings for which carriers would report any deployment activity.

F. Dark Fiber Loops Should Be Subject To A Nationwide Finding Of Impairment Or At Least A National Presumption That Can Be Rebutted By Application Of A Location-Specific Trigger.

In the *Triennial Review Order*, the Commission concluded that competitive carriers face enormous entry barriers in constructing dark fiber. The "substantial fixed and sunk costs" include most importantly "physically laying the fiber cable." *Triennial Review Order* ¶ 312. The incumbents' first mover advantages mentioned with regard to DS1 and DS3 loops above are also primarily associated with laying dark fiber. *See id*. These massive entry barriers caused the Commission to conclude that "it is generally not economically feasible to deploy duplicate fiber loop facilities." *Id*. ¶ 313. Nevertheless, in light of its observation that there are isolated locations in which competitors have deployed fiber loops, the Commission established a national presumption of impairment for dark fiber loops that was rebutted if, under the state-administered triggers, two competitors deploy their own fiber to a particular location.

As with DS3 loops, the conclusions the Commission reached with regard to dark fiber in the *Triennial Review Order* are fundamentally sound, although its presumption of impairment should now be changed to a conclusive national finding of impairment. As a preliminary matter, the Commission must continue to classify dark fiber as a separate "product market" for purposes of the unbundled regime because lit loops, such as DS1 and DS3 capacity circuits, are not a substitute for dark fiber loops.[108] As the Commission recognized, competitors that use unbundled dark fiber are able to offer "a higher level of service than 'lit' transmission because

[108] *See Evans Dec.* ¶ 39.

unbundled dark fiber integrates more efficiently into their networks by reducing the number of failure points and by providing the competing carrier with greater ability to test for quality and maintenance." *Id.* n.910.

Dark fiber allows competitors greater control over service quality because it allows them to attach their electronics directly to the glass facility whereas a competitor that relies on lit fiber must attach its electronics to the incumbents' electronics.[109] Every additional set of electronics represents a separate potential point of failure. Thus, the addition of incumbent electronics unnecessarily increases the potential points of failure on a circuit by 100 percent because everywhere the competitor deploys electronics the incumbent has already deployed them to provision its lit offering. Moreover, when failures occur, the addition of incumbent electronics makes it more difficult to identify the cause of the failure since both the incumbent and the competitor must conduct independent testing. Coordination of maintenance and repair is also more labor-intensive and less efficient where two carriers' electronics are involved because the same work must essentially be duplicated by both carriers and because the complexity of coordination creates the risk of delay and error. It is therefore clear that dark and lit fiber loop facilities are *qualitatively* different from lit facilities, and the Commission must continue to view dark fiber loops (and transport) as a separate network element for purposes of the unbundling analysis.[110]

Furthermore, retaining the availability of dark fiber loops advances the important policy goal of targeting the incumbents' unbundling obligations narrowly to the facilities that are

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[109] *See id*. ¶¶ 27-40; *Shanahan Dec*. ¶¶ 5, 7.

[110] *See Graham Dec* ¶ 5; *Evans Dec*. ¶ 39.

characterized by the most significant entry barriers and for which deployment is most likely to be uneconomic. As discussed, the significant sunk costs and incumbent first-mover advantages that make it uneconomic for a reasonably efficient competitor to deploy high-capacity loops are almost all associated with the deployment of the fiber itself. In fact, as the Commission observed, "the cost of electronics, such as those to activate dark fiber, are not sunk costs like fiber construction costs because they can be moved from one location to another location upon exist from a particular location." *Id*. n.922. Making dark fiber available as a stand-alone facility allows competitors to purchase only the facility for which the natural monopoly characteristics are most pronounced. In addition, dark fiber is by definition "unused fiber" (*id.* ¶ 312) in the incumbent LECs' networks; it is excess capacity that in many cases has been deployed and paid for by incumbent LECs during the period when they operated as legally protected monopolies. Also, the dynamism of wireline telecommunications networks is primarily in the electronics deployed by carriers rather than in the legacy transmission facilities that have already been deployed and paid for. Allowing competitors to obtain unbundled dark fiber therefore imposes few costs in terms of consumer welfare. Moreover, as discussed, the availability of dark fiber allows the Commission to eliminate unbundled lit offerings where it can be proven that the dark fiber is being used by competitors to provide their own lit loops.

The available evidence indicates that competitors deploy fiber loops only in relatively rare circumstances. As explained above, a single competitor has constructed alternative loop facilities to a single end user in a building in only a tiny fraction of the commercial locations nationwide -- between 2 and 5 percent. The QSI Report found that the evidence in the state implementation proceedings for the *Triennial Review Order* did not yield a single location at which *two or more* dark fiber loops had been deployed by competitors. *See QSI Report* at 2.

When considered in the light of the paucity of fiber loop construction by competitors, there are powerful policy reasons for establishing a national conclusive finding of impairment for dark fiber loops. As with DS3 loops, it would be administratively very difficult for the Commission to identify the locations at which multiple competitors have actually deployed their own fiber. Such a significant effort all for the purpose of identifying a tiny percentage of overall locations cannot be a worthwhile use of administrative resources.

If however, the Commission were to decide that it must try to identify isolated locations where competitors might not be impaired in the absence of dark fiber loops, it must, for the reasons discussed above with regard to DS3 loops, only eliminate dark fiber loops in particular locations where actual deployment by two or more competitors has occurred. There is simply no other reasonable means of assessing impairment. For these reasons, if it feels compelled to make specific impairment findings for dark fiber loops, the Commission should use the reporting trigger process discussed with regard to DS3 loops above for dark fiber loops.

G. The Commission Must Establish An Appropriate Transition Period To Allow Competitors To Replace UNEs With Other Arrangements.

It is critical that the Commission establish adequate transition periods for those carriers that are forced to replace unbundled dark fiber and DS3 loops with other arrangements. The transition for routes on which dark fiber loops are eliminated should be tied to a realistic time period for deploying fiber loops or, if a wholesale dark fiber offering is available, attaching electronics to other carriers' dark fiber. The Commission itself has stated that it takes between 6-9 months to deploy fiber loops, (*see Triennial Review Order* ¶ 304) but in fact a longer period of time is more reasonable. The Commission's time period assumption in the Triennial Review proceeding was based on ideal circumstances, as when ducts, conduits, poles, and other necessary infrastructure are already in place for CLEC deployment of fiber. In such cases, where

all the necessary infrastructure, materials, permits, and related issues are addressed, then UNE dark fiber can be replicated in a reasonable period of time. But the Commission cannot assume that a CLEC can automatically deploy its own fiber upon elimination of UNE dark fiber.[111] Thus, where dark fiber has been eliminated for a location and there are no wholesalers for that particular location, the Commission should automatically permit the competitor to receive unbundled dark fiber at TELRIC prices for 12 months after a finding of non-impairment. After the initial 12 months, competitive carriers must continue to have access to ILEC dark fiber, albeit at a rate that may be slightly higher than TELRIC, if the ILEC has not taken the necessary steps to permit CLECs to deploy their own fiber, (or if other impediments to deployment arise such as street cut moratoria) the CLEC can certify that it has made a good faith effort to deploy facilities, and for one or a combination of reasons deployment could not be completed in the allotted time frame.[112] In other words, the Commission's finding of nonimpairment as to a particular dark fiber UNE route must include a finding that the CLEC could deploy its own fiber within 12 months; otherwise, the Commission must establish a longer transition away from UNE dark fiber so as to permit the CLEC adequate time to replace the UNE facility. The transition for routes on

[111] Because ILECs generally do not offer a dark fiber retail service alternative to the dark fiber UNE, the Commission must treat the transition away from dark fiber UNEs differently than those UNEs that have retail analogues.

[112] The steps that a CLEC must take and issues that must be addressed, most of which require action by the ILEC, in order to replace UNE dark fiber with the CLEC's own fiber deployment include: route design pole and conduit applications to appropriate destinations (BOC, power, cable); pole and conduit license and attachment agreements; pole and conduit surveys then Phase 1, 2, and 3 make ready (conduit, rod/rope/slug (RRS), pull inner duct); poles make ready/replacement/moves; Augment all collocation to have CATT vault access; License from Collocation space to CATT to manhole zero to diverse route entries; license and notice for manhole/handhole breakout (including road construction, directional drilling, and riser pole ducting); right of way receipt for underground dig/deployment; splice pedestal/enclosure, building entry, and demark access and agreements; conduit placement agreements; any municipal permitting and supervision; actual installation of cable once everything else completed (dependent upon inventory and labor availability) and; restrictions on deployment due to seasons (cold areas), building moratoria, or municipal refusal to close roads or allow new deployment over highways or bridges.

which DS3 transport is eliminated and on which dark fiber is unavailable should also be as described herein, because carriers could well be forced to deploy their own fiber on those routes.

On routes for which DS3 transport is eliminated but on which unbundled dark fiber is demonstrably available, the transition period should be tied to a realistic time period for deploying electronics and attaching them to dark fiber. Based on carriers' experience, a 12-month transition for these customer locations is reasonable. A similar transition should apply to routes on which unbundled dark fiber has been eliminated but on which wholesale dark fiber is demonstrably available.

Competitors unable to make the necessary substitute arrangements within the specified transition periods should be able to file waiver requests. Such waiver requests should be granted in all cases where the competitors' inability to establish replacements within the transition period is due to lack of cooperation from the incumbent LEC, or due to other natural impediments or restraints to deployment such as street cut moratoria, or where the CLEC can certify that it has made a good faith effort to deploy facilities and for one or a combination of reasons deployment could not be completed in the allotted time frame.

V. INTEROFFICE DS1 TRANSPORT SHOULD BE SUBJECT TO MANDATORY UNBUNDLING NATIONWIDE; DS3 AND DARK FIBER TRANSPORT SHOULD BE SUBJECT TO AN APPROPRIATELY TAILORED IMPAIRMENT TEST.

As with loops, the impairment analysis for the transport facilities at issue in this proceeding on its own yields the conclusion that competitors are impaired in the absence of DS1, DS3 and dark fiber transport in the overwhelming majority of locations. Moreover, as also with loops, the transport facilities at issue in this proceeding either utilize legacy technology, as is the case with DS1 and DS3 transport, or utilize excess, unused capacity that the incumbents mostly deployed while legally protected monopolies, as is the case with dark fiber transport. The

"costs" of unbundling these facilities is therefore minimal, thus supporting a Commission policy that errs on the side of ensuring broad unbundling.

In the *Triennial Review Order*, the Commission observed that "[d]eploying transport facilities is an expensive and time-consuming process for competitors, requiring substantial fixed and sunk costs." *Id.* ¶ 371. The Commission observed that those costs include collocation costs, the cost of purchasing and laying fiber, and the cost of optronics used to light the fiber. *See id*. As with loops, these enormous sunk costs combine with the incumbents' first-mover advantages, most notably preferred access to rights-of-way (*see id.*), as well as the delay associated with deploying actual fiber (*see id.* n.1138), to make self-provisioning extremely costly and risky. Given that these entry barriers vary significantly from one area to another and the revenue opportunities vary significantly from one type of transport to another (*e.g.,* from DS1 to OC12), the Commission appropriately concluded that "the extent of competitive deployment of transport facilities can vary tremendously by geographic area." *Id.* ¶ 376.

Moreover, the Commission recognized specific entry barriers associated with wholesale offerings of interoffice transport, such as the need to obtain cross-connects from the purchaser's collocated equipment to the wholesaler's collocated equipment, a barrier that (like collocation itself) is controlled by the incumbent that provides the cross-connect. *See id.* ¶ 373. In addition, the Commission recognized the substantial transaction costs and service degradation associated with the need to obtain wholesale transport from multiple providers along a particular route. *See id.*

Based on these considerations, the Commission concluded that requesting carriers are not impaired in the absence of lit OCn transport, that they are presumed impaired on a national basis without access to DS1, DS3 and dark fiber interoffice transport, and that carriers should be

subject to a cap of 12 DS3s for a particular interoffice route. The Commission delegated to the states the responsibility of determining whether the national presumption of impairment was rebutted for a particular type of transport on a particular point-to-point route.[113]

On appeal, the D.C. Circuit explicitly addressed two aspects of this framework. As mentioned above, the court held that the Commission had unlawfully subdelegated to the states the responsibility of administering the impairment triggers. *USTA II* at 574. In addition, the court discussed, in *dicta*, the Commission's use of a route-by-route geographic market definition under the impairment triggers. The court stated that the Commission had explained why competition on one route is not "sufficient" to make impairment findings on another route that is "similarly situated with regard to the 'barriers to entry' that the Commission says are controlling." *Id.* at 575. Nevertheless, the court stated that the Commission had failed to explain why competition on one route is "irrelevant" to the impairment analysis on another "similarly situated" route. *Id.* In light of this underlying observation, the court stated that the Commission had not adequately explained why a route-by-route analysis is in fact a more reliable geographic market definition than larger market categories such MSAs, although the court conceded that in fact "it may be infeasible" to define the entry barriers in a way that they "may usefully be applied to" a larger geographic market. *Id.*

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[113] Under the triggers, requesting carriers are unimpaired for DS1 transport if two wholesalers actually offer operational DS1 transport on a particular route, and they are unimpaired for DS3 or dark fiber transport if three self-provisioners or two wholesalers actually provide DS3 or dark fiber transport along a particular route. In order to meet the DS1 or DS3 trigger, a competitor could rely on unbundled interoffice dark fiber. As with loops, therefore, the availability of dark fiber was used as a means of eliminating lit transport. Finally, to qualify under the triggers, a competitor's transport facility must actually connect both ends of the route; it is not enough if multiple competitors' facilities could be connected together in a "daisy chain" to connect both ends of the route. *See Triennial Review Order* ¶ 402.

Importantly, the Court seems to have implicitly approved of the other aspects of the transport impairment triggers. The court did not find fault with the Commission's separate examination under the triggers of self-provisioning and wholesaling of transport. It did not find fault with the separate impairment analysis for DS1, DS3 and dark fiber transport. The court also seemed implicitly to accept the reasonableness of the use of three self-provisioners and two wholesalers under the triggers. As mentioned above, the court seemed to accept that the impairment standard in the statute requires at least that it is possible for "multiple competitors" to supply a particular type of transport in a market. Taken in context, this reference seems to support the view that the three self-provisioners and two wholesalers standard is a reasonable application of the statute.

The only real issue for the Commission in this proceeding is therefore to determine the extent to which, in a transport standard administered by the agency itself, it must adopt larger geographic market definitions that aggregate multiple transport routes that are "similarly situated with regard to the 'barriers to entry' that the Commission says are controlling."

A. The Commission Should Conclude That Competitors Are Impaired On A Nationwide Basis Without Access To DS1 Interoffice Transport.

The Commission concluded in the *Triennial Review Order* that "[t]he record indicates that competing carriers generally cannot self-provide DS1 transport." *Triennial Review Order* ¶ 391. This is because a competitor needing DS1 capacity transport "faces the same fixed and sunk costs as other carriers deploying transport or using alternatives, but faces substantially higher incremental costs across its customer base than a carrier requesting higher capacity transport." *Id*. The Commission also concluded that "DS1 transport is not generally made available on a wholesale basis" (*id.* ¶ 392) and that "we have very limited evidence of carriers using alternative DS1 transport" (*id.* n.1216). In this regard, the Commission noted that the

wholesalers themselves had stated that they "would have to install additional multiplexing equipment and refine back office systems to handle DS1 interface wholesale transport." *Id.* n.1218. Accordingly, the Commission stated that a wholesale market for DS1 transport was at most "nascent," and it cited with approval competitors' assertions that "a wholesale market for DS1 transport has not developed due to operational and cost considerations." *Id.* ¶ 392.

Nevertheless, out of an abundance of caution, the Commission decided to apply the wholesale impairment trigger to DS1 transport. In so doing the Commission candidly admitted that the trigger was "not likely to have an immediate impact" and that its decision to apply the wholesale test to DS1 transport was based solely on the possibility that "technological advances may allow [a DS1 wholesale transport] market to become practical" in the future. *Id.* n.1219. Indeed, the Commission stated that the DS1 wholesale test was adopted based purely on this "predictive judgment." *Id.* ¶ 392.

The available marketplace evidence indicates that wholesale DS1 transport is still unavailable in virtually every market. The lack of any wholesale DS1 transport is utterly unsurprising in light of the entry barriers associated with offering this service for a wholesaler. As NuVox explains in its comments, the increased costs in terms of transaction costs and operational impediments associated with offering DS1 transport are extremely significant even for a firm that offers DS3 transport at wholesale. There is also no basis for concluding that these barriers will be significantly reduced anytime soon.

If it was ever reasonable for the Commission to have applied the wholesale trigger to DS1 transport, it was certainly not necessary in light of the available evidence. But now that the Commission must itself administer the impairment test, there is no longer any place for a wholesale trigger in the context of DS1 transport. It is simply a waste of scarce Commission

resources to apply a trigger to a facility for which there is no reason to think there is any significant competition from *any* competitors, let alone multiple competitors in a market. Moreover, application of route-specific triggers in an attempt to unearth the few isolated locations where competitors offer DS1 transport at wholesale is inconsistent with the D.C. Circuit's admonition that the Commission adopt a "sensible definition of the markets in which deployment is counted." *USTA II* at 574. The Commission should therefore adopt a conclusive finding of national impairment for DS1 transport.

B. The Commission Should Adopt A Three Tiered Approach To DS3 And Dark Fiber Transport Impairment.

Dark fiber and DS3 transport are somewhat different from DS1 transport because competitors have self-deployed and made available at wholesale these facilities along some routes, mainly in the central business districts in the major metropolitan areas in the country. As the Commission explained in the *Triennial Review Order*, competitors seeking to deploy these facilities face steep entry barriers in the form of the enormous sunk and fixed costs associated with deploying fiber as well as the incumbents' substantial first-mover advantages. *See Triennial Review Order* ¶¶ 381, 386. The Commission did find that in some cases competitors had deployed both fiber and DS3 transport, and in fact most carriers that have in the past self-deployed or made DS3 transport available at wholesale have done so via fiber they themselves constructed. *See id.* ¶ 387. Because the Commission lacked specific evidence as to the routes on which competitors had constructed fiber and DS3 transport, as mentioned, it delegated to the states the responsibility of applying the self-provisioning and wholesale triggers to those facilities and also established a cap of 12 DS3s on the number of interoffice transport network elements a competitor could purchase.

With regard to dark fiber transport in particular, the Commission concluded that, as with dark fiber loops, the availability of dark fiber serves important policy objectives of the Act. The Commission found again that dark fiber allows competitors to operate more efficiently,[114] to control service quality more effectively, and to purchase only that part of the incumbent network for which they are impaired. *See id.* ¶ 383. For all of these reasons, the Commission concluded that dark fiber transport advances the policy goals of facilities-based competition and innovation that underlie the Communications Act and the unbundling regime in particular. *See id.* These conclusions unquestionably remain sound.[115]

The issue for the Commission in this proceeding regarding dark fiber and DS3 transport is how to design an impairment test that aggregates transport routes that are similarly situated with regard to the relevant entry barriers while minimizing the number of false negatives and false positives. In this regard it is critical to recognize that the entry barriers associated with deploying interoffice fiber vary substantially in different contexts.[116] All of the problems described above in the DS3 loop section other than those concerning building access and customer tolerance for service disruption apply equally to transport. For this reason, the entry

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[114] *See, e.g.,* Comments of Conversent Communications LLC, CC Dkt. Nos. 01-338 *et al.,* at 6 (filed Apr. 5, 2002) ("*Conversent Comments*") ("[I]f Conversent were forced to attempt to replicate its eastern Massachusetts SONET rings by relying on Verizon's unbundled, lit, OC-48 transport offering, it would result in annual recurring charges of $15,372,594.00. This increase in transport costs would prevent efficient entry in the second and third tier markets in which Conversent operates in Massachusetts.").

[115] The Commission must clarify, in the context of dark fiber transport unbundling, that where dark fiber impairment is found on a particular interoffice route, ILECs are required to provision dark fiber from one end of that route to the other, notwithstanding the existence of an intermediate central office on that route. For example, if the dark fiber UNE is available between central offices A and Z, and the ILEC dark fiber between central offices A and Z passes through central office X on the way from A to Z, the ILEC is required to provide the entire route from A to X and X to Z without requiring the CLEC to collocate in central office X in order to access the A to Z route.

[116] *See Gawlick Lightship Dec.* ¶ 4.

barriers faced by competitors seeking to deploy interoffice fiber vary significantly from among urban markets and among different routes within the same urban markets.

Furthermore, while competitors have deployed fiber and DS3 transport in some places, they have done so on only a very small percentage of interoffice routes.[117] As the incumbents have themselves conceded, the competitors are far more likely to have deployed their own transport in the downtown areas of the largest urban areas where large of groups of businesses are concentrated. *See SBC August 18 Letter* at 2; *Verizon July 2 ex parte* at 2. The incumbents essentially concede that, as explained with high-capacity loops, any "sensible" definition of the relevant market for transport impairment should be limited to routes within the top 50 MSAs.

But even within those largest cities, interoffice transport has only been deployed in specific areas, leaving huge swaths of these markets with no competitive transport or, at most, with only a single competitor.[118] For example, the New York PSC staff estimated in a *Triennial Review Order* implementation proceeding that, in New York City, the most competitive market in the country, the self-provisioning trigger for DS3 transport was met on only 44 interoffice routes and the wholesale trigger for DS3 transport was met on only 37 routes.[119] The same report found that the self-provisioning trigger for dark fiber was met on only 34 routes (no separate analysis was performed for the dark fiber wholesale trigger). *See NY PSC Analysis* Attachment 7, p.1. These routes represent a very small percentage of even the routes in New

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[117] *See, e.g., Conversent Comments* at 8 ("[I]n eastern Massachusetts, access to dark fiber IOF from third party vendors is only available for 10 of Conversent's 75 interoffice spans.").

[118] *See Gawlick Lightship Dec.* ¶ 10 (describing Boston MSA).

[119] *See State of New York Public Service Commission, Department of Public Service Staff's Analysis of Switching and Transport Triggers*, Case 03-C-0821, at attachment 5, p. 1, attachment 6, p. 1 (rel. Mar. 31, 2004) ("*NY PSC Analysis*").

York City. The results of the QSI study are even more dramatic. In the 14 states for which QSI reviewed data,[120] it found that the self-provisioning trigger was met for only 55 routes for DS3 transport and on 46 routes for dark fiber. *See QSI Report* at 17-18. QSI also found that the wholesale trigger was met for DS3 transport on only 40 routes and on 46 routes for dark fiber transport. *See id.* at 19-20.

For purposes of proposing an impairment standard, it is telling that the ALTS' members' appraisal of the market yields the conclusion that, in the areas within the top 50 MSAs in which they operate, there are normally multiple wholesale providers of DS3 transport only on routes connecting wire centers that serve the highest concentrations of business customers. This is unsurprising because, of course, the entry barriers associated with self-deployment are most likely to be overcome along routes where revenue opportunities are greatest. On the other hand, the ALTS' members' experience is that, again not surprisingly, on routes connecting wire centers that serve relatively low concentrations of business customers, there are normally no competitive alternatives for DS3 transport.

ALTS has studied the extent to which the available public data regarding business lines served by specific wire centers on either end of a transport route could be used as a proxy for impairment for interoffice DS3 transport. The only publicly available data the ALTS members could obtain regarding business access lines was generated by PNR Associates for the Commission for purposes of designing the forward-looking high-cost subsidy model for non-rural LECs. The data actually represents estimates of total business lines based on publicly

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[120] The 14 states include the 12 studied for loops with the addition of Washington state and New York. *See QSI Report* at 17.

available secondary sources such as Dun & Bradstreet's database of business locations, the LERG, census data, and incumbent LEC wire center boundaries.[121] There is no way to know how accurate the business lines per wire center data is, a problem that is made worse by the fact that the estimates were developed based on information obtained in 1999.

Notwithstanding these problems, the ALTS members found that the PNR business access line data offers a fairly reliable proxy for identifying the interoffice routes on which multiple non-incumbent LEC sources of DS3 transport are usually present and on which there are usually no non-incumbent LEC sources of DS3.[122] Based on the ALTS' members review of the availability of non-ILEC sources of supply in the areas within the top 50 MSAs, it is reasonable to assume that multiple non-ILECs have or could provide DS3 interoffice transport along routes connecting two wire centers with 40,000 business access lines and above (hereinafter referred to as Tier One routes). Similarly, it is reasonable to assume that no non-ILEC sources of supply are available or likely to become so on routes connecting two wire centers serving 10,000 business lines or less within the top 50 MSAs and routes outside of the top 50 MSAs (hereinafter referred to as Tier Three routes). On the other hand, no immediate assumptions can be made regarding competitive alternatives for routes that do not fall within these two categories (hereinafter referred to as Tier Two routes) because the market evidence regarding the presence of even one non-incumbent supplier is simply too inconsistent on these routes to support firm determinations.

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[121] *See Federal-State Board on Universal Service, Forward Looking Mechanism for High-Cost Support for Non-Rural LECs,* Tenth Report and Order, 14 FCC Rcd 20156, ¶ 51 (1999).

[122] *See, e.g.*, *Gawlick Lightship Dec*. ¶ 9.

Thus, although impairment should be presumed on Tier Two routes, the Commission should utilize triggers as described below to evaluate competitive entry.

These conclusions are intuitively logical. Wire centers serving relatively large concentrations of business lines offer relatively large revenue opportunities to competitors.[123] It seems that those revenue opportunities in Tier One are large enough that competitors have been able to accumulate the scale necessary to overcome the relevant entry barriers to deploying fiber or they have deployed fiber in these areas based on the predictive judgment that they would be able to achieve a scale necessary to justify such deployment (a predictive judgment that of course has turned out to be unreliable for all of the companies that have been forced into bankruptcy). To be sure, there are some routes within Tier One that multiple entrants do not serve. But a sensible definition of the relevant market for these purposes cannot be perfect, and the proxy proposed for Tier One seems to be the most reliable proxy for the presence of multiple non-incumbent suppliers on a route given the available information.[124]

On Tier Two routes the revenue opportunities are apparently less significant because the concentration of business customers is lower. Along these routes the substantial variability in the entry barriers among different routes seems to make it all but impossible to infer that entry on one route makes entry on another efficient. There is entry on some of these routes, but there does not seem to be any discernable pattern that would permit the Commission to make broad

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[123] *See id.* ¶ 5.

[124] The FCC should accept this ALTS proposal as the most reasonable method of evaluating impairment in these top tier markets. Should the Commission not agree, it should at minimum ensure that whatever modifications it considers examine the actual presence of competitive alternatives by, for example, looking at the number of collocated fiber transport providers actually providing service over the central office route in question.

judgments as to impairment. Moreover, given the large amount of inefficient entry in the past, and given the importance (as explained) of tying impairment to efficient entry, the Commission must be very wary of inferring too much from the presence of entry on Tier Two routes.[125]

On Tier Three routes, the evidence indicates that the revenue opportunities associated with the wire centers with relatively small concentrations of business lines are too insignificant to overcome the relevant entry barriers, even when they are at their lowest. Of course, there are isolated routes on which one or more non-incumbent has supplied DS3 transport on Tier Three routes. But again, proxies cannot be perfect and the Tier Three cutoff seems to be overall an accurate predictor of impairment.[126]

The foregoing discussion offers tentative support for the following framework for determining impairment for interoffice DS3 and dark fiber transport.[127] The Commission could rely on the PNR Associates business access line density data to conclude that competitors are conclusively unimpaired without DS3 and dark fiber transport on Tier One routes and conclusively impaired without DS3 and dark fiber transport on Tier Three routes. For Tier Two

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[125] *See Gawlick Lightship Dec.* ¶ 8.

[126] It is also significant that the incumbent LECs themselves have in the past supported using business access line concentration as a proxy for transport impairment. *See* Declaration of National Economic Research Associates, Inc. on Behalf of Bellsouth, CC Dkt. Nos. 01-338 *et. al.*, at Table 16, p. 103 (filed Jul. 17, 2002) (alleging availability of competitive interoffice transport by wire-center); Reply Comments of SBC Communications Inc., CC Dkt. Nos. 01-338 *et. al.*, at 153 (filed Jul. 17, 2002) (asserting no impairment in wire centers that, among other things, serve over 15,000 business lines or more).

[127] It is critical that the Commission understand that ALTS has proposed the definitions of Tiers One, Two and Three herein based solely on the proxies as defined herein using the PNR estimates of business lines per wire center. If the Commission were to consider data from the PNR report other than business access lines per wire center, ALTS would need to undertake separate consideration of that data to determine whether the data is a reasonable proxy for impairment and, if so, how the Tiers should be defined. Similarly, if the Commission were able to use business access line per wire center data from a different source (for example from the incumbent LECs themselves) ALTS would similarly need to undertake a separate analysis of whether that data could be used to establish proxies for impairment and, if so, how the Tiers would be defined using such data.

routes, a route-by-route analysis is necessary. Accordingly, the Commission should administer the triggers adopted in the *Triennial Review Order* to Tier Two routes. This can be accomplished by requiring carriers to provide reports regarding their DS3 and fiber self-deployment and wholesale activity on Tier Two routes in the top 50 MSAs. Given the relatively small number of routes on which such reporting is likely to produce information, this process should be manageable. It is also the case that firms that have self-deployed will have the incentive to provide full reporting regarding the locations on which they have deployed their own transport facilities because such reporting will lead to the elimination of the regulated incumbent LEC offering of transport. Finally, as a backstop to the impairment proxies, the Commission should continue to apply the cap of 12 DS3s established in the *Triennial Review Order* for a particular route to Tier Two and Tier Three routes.[128]

Finally, as with loops, it is critical that the Commission establish adequate transition periods for those carriers that are forced to replace unbundled dark fiber and DS3 transport with other arrangements.[129] The transition for routes on which dark fiber transport are eliminated should be tied to a realistic time period for deploying fiber transport or, if a wholesale offering is available, attaching electronics to other carriers' dark fiber. For essentially the same reasons cited above with regard to loops, 12 months is a reasonable transition period for fiber transport deployment, but only if the Commission has adequately evaluated the feasibility of CLEC self-deployment of fiber. Thus, where dark fiber has been eliminated for a route and where there are

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[128] This capacity-based cap should obviously not be applied to dark fiber UNEs, which are by their nature not conducive to such an artificial capacity constraint.

[129] *See Shanahan Dec.* at ¶ 12 (discussing administrative and related issues that must be addressed prior to self-deployment of facilities).

no wholesalers for that particular route, the Commission should mandate tiered access to ILEC dark fiber as a transition plan while the CLEC works to deploy its own fiber facilities as UNE replacements. Specifically, Commission should permit the competitor to receive unbundled dark fiber transport at TELRIC prices for 12 months after a finding of non-impairment, and the Commission must mandate continued access to dark fiber, at slightly higher rates than TELRIC, for a reasonable period of time thereafter if the ILEC has not taken the necessary steps to permit CLECs to deploy fiber, or if other impediments to deployment arise such as street cut moratoria and the CLEC can certify that it has made a good faith effort to deploy facilities and for one or a combination of reasons deployment could not be completed in the allotted time frame.[130] The transition for routes on which DS3 transport is eliminated and on which dark fiber is unavailable should also be the same because carriers could well be forced to deploy their own fiber on those routes.

On routes for which DS3 transport is eliminated but on which unbundled dark fiber is demonstrably available, then the transition period should, as with loops, be tied to a realistic time period for deploying electronics and attaching it to dark fiber. For essentially the same reasons cited with regard to loops above, a 12 month transition for these routes is reasonable. A similar

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[130] The steps that a CLEC must take and issues that must be addressed, most of which require action by the ILEC, in order to replace UNE dark fiber with the CLEC's own fiber deployment include: Route design pole and conduit applications to appropriate destinations (BOC, power, cable); pole and conduit license and attachment agreements; pole and conduit Surveys then Phase 1, 2, and 3 make ready (conduit, rod/rope/slug (RRS), pull inner duct); poles make ready/replacement/moves; augment all collocation to have CATT vault access; license from collocation space to CATT to manhole zero to diverse route entries; license and notice for manhole/handhole breakout (including road construction, directional drilling, and riser pole ducting); right of way receipt for underground dig/deployment; splice pedestal/enclosure, building entry, and demark access and agreements; conduit placement agreements; and any municipal permitting and supervision; Actual installation of cable once everything else completed (dependent upon inventory and labor availability); Restrictions on deployment due to seasons (cold areas), building moratoria, municipal refusal to close roads or allow new deployment over highways or bridges.

transition should apply to routes on which unbundled dark fiber has been eliminated but on which wholesale dark fiber is demonstrably available.

Also as with loops, competitors unable to make the necessary substitute arrangements within the specified transition periods should be able to file waiver requests. Such waiver requests should be granted in all cases where the competitors' inability to find replacements within the transition period is due to lack of cooperation from the incumbent LEC due to natural impediments or restraints to deployment such as street cut moratoria or where the CLEC can certify that it has made a good faith effort to deploy facilities and for one or a combinations of reasons deployment could not be completed in the allotted time frame.

VI. THE COMMISSION MUST RECONFIRM ITS RULES MANDATING ACCESS TO EELS AND PERMITTING COMMINGLING

The Commission should reaffirm its rules mandating access to combinations of network elements, specifically its findings that enhanced extended loops ("EELs") facilitate the deployment of CLEC equipment and facilities. In the *Triennial Review Order,* the Commission defined an EEL as a combination of an unbundled local loop and dedicated transport, which can include electronics (e.g., multiplexing). *See Triennial Review Order* ¶ 571. The Commission mandated that incumbents continue to combine network elements upon request where it is technically feasible to do so, and where combining elements would not undermine a competitor's ability to obtain access to UNEs or to interconnect with the ILEC. *See id.* ¶¶ 573-4. This requirement applied fully to EELs of all capacities so long as the underlying loop and transport facilities met the impairment standard *See. id.* ¶ 575. Moreover, the Commission prohibited incumbents from restricting competitors' ability to "commingle" a UNE or UNE combination with one or more facilities or services a competitor obtains from the ILEC pursuant to a method other than unbundling. There is nothing that has occurred since the *Triennial Review Order* to

warrant a change in EEL availability requirements, including new EELs and EEL conversions from special access.

The Commission's EEL rules are an essential component of the Commission's efforts to facilitate the deployment of CLEC equipment and facilities.[131] As a practical matter, wherever loops and transport are available as UNEs, the Commission's EEL rules simply require ILECs to provide the two in combination with one another. As such, because the Commission should maintain access to DS1 loops and transport at the national level, DS1 EELs should be available nationwide as well. A DS1 EEL is a combination of a DS1 loop cross-connected in an ILEC wire center (in which the requesting carrier is not collocated) to a DS1 dedicated interoffice transport facility (without multiplexing to a higher capacity transport facility) that terminates either in a requesting carrier's own collocation space in an ILEC central office, or that carrier's switch in another location. As the Commission previously concluded, EELs promote facilities-based competition and innovation. *See Triennial Review Order* ¶ 364. EELs enable CLECs to extend their geographic footprint, enabling them to provide competitive service to small business customers who may be located outside of the city centers or areas of business concentration. *See id.*

For impairment purposes, the DS1 transport component of a DS1 EEL shares the characteristics of a DS1 loop in that the revenue opportunity available to overcome entry barriers for the self-deployment of a DS1 EEL is the same as for a DS1 loop. This is because the DS1

[131] There is no reason, however, for the Commission readopt EELs eligibility criteria that unduly hinder CLEC access to EEL arrangements.

interoffice component of a DS1 EEL is not used to aggregate traffic from a number of end users as is interoffice transport generally.[132] Rather the DS1 transport leg of the EEL carries the traffic of the single, small business end user served by the DS1 loop component of the EEL. As the name implies, an EEL is simply a longer loop. The revenue generated from the single customer served by the EEL must cover the full cost of the EEL, both the loop and transport component. As the Commission recognized with respect to DS1 loops, the revenue opportunity is insufficient to recover the sunk cost of constructing a the DS1 loop. *See id.* ¶ 326. The same conclusion applies to DS1 EELs. The revenue opportunity available from a DS1 EEL is simply insufficient to overcome entry barriers associated with the costs of construction.[133]

Nor is it feasible to replace the ILEC DS1 transport component of the EEL with third-party provided DS1 transport. In the experience of the ALTS membership, alternative transport at the DS1 level is not available except in extremely limited circumstances. This is consistent with the Commission's findings, (*see Triennial Review Order* ¶ 390) which was affirmed by the evidence gathered in state proceedings. Thus, as with DS1 wholesale loops, a national finding of impairment is fully justified given the extreme paucity of DS1 wholesale transport. And, as with DS1 loops, the administrative burden of identifying routes that may have sufficient DS1 wholesale transport availability far outweighs the incremental benefit of attempting to eliminate any false-positives.

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[132] *See id.* ¶ 370 (noting that CLECs "generally use dedicated transport as a means to aggregate end-user traffic to achieve economies of scale.").

[133] The Commission found in the *Triennial Review Order* that carriers could not self-deploy any DS1 transport and thus did not adopt a DS1 self-deployment trigger. *See id*. ¶ 409.

Impairment is evidenced not only by the general lack of DS1 wholesale transport, but also by the significant economic and operational barriers to utilizing third party transport providers at the DS1 level, especially when used to transport the traffic of only a single end user as part of EEL-type arrangement. Using third party providers for the transport leg of the EEL will require breaking apart what is in reality a single end-to-end circuit. In virtually all circumstances, the third-party provider will be able at most to provide only the interoffice piece of the EEL. It will not be able to also provide the DS1 loop to the customer. Thus, what is now a single circuit offered by one carrier (the ILEC) will have to be broken into a loop piece provided by the ILEC and a transport piece provided by the third party. Because, by definition with respect to an EEL, the CLEC will not have a collocation arrangement in the wire center where the loop terminates,[134] existing loops will have to be disconnected and a new loop ordered to be cross-connected directly to the third-party providers' collocation or POP.

VII. ENTRANCE FACILITIES SHOULD BE AVAILABLE AS UNES AS A TRANSITIONAL MECHANISM TO ENABLE COMPETITORS TO ENTER THE MARKET.

In the *Triennial Review Order*, (¶ 365) the Commission defined interoffice transport as "transmission facilities connecting incumbent LEC switches and wire centers within a LATA," thus excluding entrance facilities that carry traffic from incumbent switches or wire centers to a point on a competitor's network from the definition of unbundled network element. *See id.* n.1119. On appeal, the D.C. Circuit stated that the Commission's decision to exclude entrance facilities from the definition of network element appeared to be based on an unreasonable

[134/] EELs are designed to enable carriers to access loops without the cost of collocation at the wire center where the loop is terminated.

interpretation of the statute, and the court remanded the matter to the Commission for further consideration. *See USTA II* at 586.

Competitors entering a market face the same steep entry barriers in seeking to deploy entrance facilities as they do in constructing other transmission facilities such as loops and transport. All of the substantial sunk and fixed costs associated with deploying fiber apply fully to entrance facility deployment. Nevertheless, entrance facilities run along routes that are selected by competitors themselves and are not likely to be subject to multiple sources of non-incumbent LEC supply (except perhaps where a competitor has placed its switch in a collocation hotel).

Accordingly, the most appropriate means of addressing the impairment that competitors face in overcoming the entry barriers for entrance facilities is for the Commission to require that these facilities be unbundled, as either dark fiber or lit DS3s, until such time as a competitor has achieved traffic volumes such that self-deployment of entrance facilities becomes efficient. To establish this point, the Commission should simply limit the number of DS3s or dark fiber pairs available as unbundled network elements to a competitor for an entrance facility route.

The use of unbundling as a transitional mechanism to address significant entry barriers faced by new entrants is consistent with the D.C. Circuit's decision in *USTA II*. In its discussion of unbundled switching, the Commission implicitly confirmed that the use of unbundled switching as an interim mechanism to allow entrants to serve customers until hot cuts could be performed was a reasonable use of unbundled network elements. *See USTA II* at 570-571. Similarly, allowing competitors access to unbundled entrance facilities would allow competitors to serve customers until it becomes efficient for them to deploy their own facilities.

VIII. THE COMMISSION MUST REVISE ITS UNBUNDLED SWITCHING RULES TO PERMIT SWITCHING ACCESS AS AN ENTRY MECHANISM, NOT A PERMANENT BUSINESS PLAN

In USTA II, the court vacated the Commission's determination that ILECs must make mass market switching available as a UNE, and remanded that issue to the Commission for re-examination. *See USTA II* at 22. The court based its decision on what it found to be the Commission's unlawful subdelegation of its § 251(d)(2) responsibilities. *See id.* at 19-22. It should be noted, however, that the court did not reject the Commission's impairment standard. *See id.* at 24. Rather, the court took issue with the Commission's implementation of that standard. As such, the Commission's impairment conclusions, and the bases for those conclusions remain viable.

Given the significant barriers to entry that CLECs encounter, as confirmed by the Commission's analysis in the *Triennial Review Order*, ALTS herein proposes a rule by which a CLEC would be permitted access to unbundled local switching ("ULS") in limited circumstances. Specifically, this proposal would permit access to UNE switching only until such time as a requesting carrier's market penetration in a specific central office provides an economic base that would support a transition off of the incumbent's switch in that central office or, in certain limited instances, until ILEC-controlled structural impediments to facilities-based service in a central office have been removed.[135] If properly implemented, the proposed rule would allow CLECs to continue using ULS and, therefore, UNE-P, only in those limited instances

[135] FDN believes that the Commission's analysis of unbundled switching should be more closely tied to the addressable market in each central office, which could result in a different cap on the number of permissible lines in each office. As such, FDN does not join this section of the ALTS comments.

where a CLEC is impaired and unable to deploy facilities. The ALTS proposal hinges on a bright line cut-off point at a set number of lines, above which a carrier no longer would be eligible for UNE-P in a given central office. ALTS also proposes a transition plan for rapidly moving such a carrier's UNE-P lines to UNE-L. The ALTS proposal is simple and easy to administer and is aimed at promoting facilities based competition to the broadest possible market, nevertheless recognizing that there are operational and economic factors that require the continued availability of ULS, even for otherwise facilities-based competitive carriers, under certain circumstances.

As an initial matter, although all of ALTS member companies are facilities-based, and serve end user customers via a combination of their own data and/or voice switches and various ILEC network elements, a segment of ALTS' membership also uses UNE-P in certain narrow circumstances: 1) where the minimum viable scale for collocation has not yet been met, or 2) in areas where collocation space is exhausted and, thus, unavailable.[136]

Whether, or to what extent, any given ALTS member uses ULS, and for how long, is a function of the markets in which they operate, and a host of economic and operational factors that dictate whether or when a company deploys facilities to reach end user customers. On remand, as the Commission conducts its impairment analysis on switching, it must take into account what a reasonably efficient CLEC is capable of in terms of further building of

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[136] Subsumed within this list are many of the operational and economic factors that the Commission has recognized may make CLEC market entry uneconomic without access to the incumbent's switch, including collocation space exhaust, and low line density. *See Triennial Review Order* ¶¶ 477-484. In addition, there may be other circumstances when UNE-P should be available to compensate for instances in which the ILECs' network configurations interfere with a CLEC's ability to access UNE loops. *See ex parte* presentation of Tina M. Pidgeon Vice President, GCI, CC Docket No. 01-338 *et. al.* (filed Jul. 1, 2004) (regarding ILEC IDLC systems).

collocations to serve end user customers. Going forward, speculative deployment of capital to reach prospective customers is impossible. Unless or until a CLEC can demonstrate demand sufficient to warrant the expense of further network construction and deployment of additional facilities, including collocations and related equipment, no such construction will occur. For carriers such as the ALTS members, who already have multiple switches in operation across their service territories, the need to achieve scope and scale efficiencies forms the primary basis of impairment sufficient to justify the continued availability of ULS and UNE-P, subject to certain limitations and conditions on that availability.

A. Economic Impairment

As alluded to above, the decision as to where and when to deploy capital to install facilities capable of reaching end user customers is a complex calculus for CLECs, all of which face serious capital constraints that limit their ability to expand their existing on-net footprints. For a reasonably efficient CLEC, the decision to deploy facilities hinges on the following primary economic factors: 1) the cost of buying, equipping, and installing a switch (which also includes the cost to lease space for the switch, and access to and use of AC and DC power sources, among a host of other attendant capital expenditures and operating expenses); 2) collocation costs (which includes the upfront cost of obtaining space in the ILEC CO and the cost of purchasing, installing, and operating necessary equipment and obtaining related trunking); and 3) revenue opportunities (which include the number of addressable lines, customer mix, geographic location, churn rates, etc.).[137]

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[137] *See Jenn Dec.* ¶ 9; *Hanser Dec*. ¶¶ 2-4.

As a practical matter, however, the Commission must take note that few if any CLECs have access to sufficient capital resources at this point to fund the expansion of their collocation footprints materially in advance of any actual revenue in that footprint. The changes in the capital markets for competitive carriers since 2001 stopped the often irrational *forward* investment in CLEC network expansion in its tracks. The continuing and accelerating uncertainty of the regulatory environment, compounded by the Commission's own proposal for imminent price hikes of fifteen percent or more on network elements previously available at TELRIC rates, has rendered further network expansion all but unthinkable when there is no existing revenue base in the new network areas.

Assuming that capital constraints were not a factor, an efficient CLEC nevertheless must be able to make a viable business case for any capital expenditure required for establishing new collocations. Although the absolute number of business lines that a CLEC must serve in a wire center in order to justify the cost of establishing a new collocation in that wire center may vary from CLEC to CLEC, the same basic premise holds true for all CLECs: a certain minimum number of business lines served off of a given wire center must be able to be captured before the CLEC will undertake to collocate there. .

Despite the capital constraints, the regulatory uncertainty, the intransigence of the ILECs, and the odds, members of ALTS have continued to grow their businesses. One of the key growth segments in the small and medium sized business market for some CLECs has been in customers with multiple office locations. Many ALTS member companies have found success in marketing to customers that are located in small buildings, not large downtown skyscrapers, geographically dispersed over large urban and suburban areas. These customer locations are spread over many

wire centers, also geographically dispersed, that typically lack a high density of business lines.[138] Substantial numbers of these same business customers have satellite offices that also are spread across a large geographic area. Again, these customers' satellite offices often are served off of wire centers or central offices lacking a high density of business lines.[139] Any CLEC hoping to capture these customers must be able to offer service across the entire region, or at least be able to provide service to their customers' satellite office locations – particularly if the CLEC wants to be competitive with the ILEC that generally is capable of offering comprehensive regionwide coverage.[140] In most cases, these customers would not even consider a CLEC as a service provider if the CLEC were unable to serve all of the customer's locations, whether in the carrier's on-net footprint, or off-net. In fact, some ALTS members have experienced first hand the differences in customer acquisition in markets where they do and do not use UNE-P as a method to serve multi-location customers.[141]

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[138] *See* Declaration of Rainer Gawlick, Lightship, ¶¶ 5-6. (Gawlick Declaration); Jenn Declaration ¶¶ 10-11. The Commission took note that "whether entry will be economic depends critically on the values of certain factors affecting a competing carrier's likely costs and revenues, and that these factors vary significantly among locations and types of customers." *Triennial Review Order* ¶ 484. The Commission further observed that entry may be "uneconomic without access to the incumbent's switch" where certain economic barriers exist, such as in low line density or smaller wire centers. *Id.*; *see also* n.1499. This proposition was supported, as the Commission noted, even by studies submitted by the incumbent LECs which found that entry would be uneconomic in wire centers under a certain size. *See id.* ¶484.

[139] *See* declaration of Robert E. Pickens (Pickens Declaration) at ¶ 6.

[140] In fact, some ALTS members have been extremely successful serving such multi-location customers, with as many as one-third to one-half of the customers that they serve having multiple physical locations, many of which may fall outside of the carrier's on-net footprint. Gawlick Declaration ¶¶ 4-6; Pickens Declaration ¶¶ 9-10.

[141] *See* Jenn Declaration ¶ 12.

For a CLEC to attempt to collocate in all wire centers in a region without the required revenue base in most of those wire centers is prohibitive from a capital perspective.[142] Further, collocating in all wire centers in a region without the required revenue base in most of those wire centers is also prohibitive from an operating cost perspective.[143] Indeed, the fact that many of these off-net customer locations may be served off of wire centers with lower density or where the CLEC does not yet have enough of a customer base to make the wire center a candidate for expansion, means that it may take some time for the CLEC to find it economic to establish a collocation in the wire centers serving each of the multi-location customer's offices, and an off-net strategy likely would be necessary for an extended period of time until the customer churns off of the CLEC's service, or until the CLEC sufficiently penetrates target customer market served off of that wire center to justify expansion of its network into that wire center. The ILECs' historical position as providers with ubiquitous networks able to serve multi-location customers throughout a region with a significant and stable revenue stream throughout the region place them at a competitive advantage that cannot be overcome but for the continued availability of UNE-P.

Typically, the ALTS members that use UNE-P in addition to their facilities will only invest in collocations in wire centers where the number of customers is sufficient to provide the company an opportunity to earn the necessary return on the collocation investment in a

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[142] For example, for Lightship Telecom to fill out its entire service footprint would cost approximately $40 million in capital costs. For a company with $50-70 million in annual revenues, such deployment is impossible. *See* Gawlick Declaration ¶ 10.

[143] Using Lightship Telecom again as an example, the estimated $1.3 million in additional operating expenses would be beyond the ability of the company to absorb if it were forced to deploy facilities ubiquitously. *See* Gawlick Declaration ¶ 11.

reasonable period of time.[144] For all practical purposes, under current economic constraints, customers with locations in non-collocated wire centers must be served using an off-net product for some extended period of time. For all ALTS members, whether they augment with UNE-P or not, the target market of customers is first and foremost the market that a CLEC can serve using its own facilities and UNEs, via its own collocations and switch. But, without an off-net product to serve the multi-location customers, an efficient CLEC would not find it profitable to build as many collocations as they have built so far because an entire market segment (multi-location customers) would have been off-limits to them, short of engaging in speculative investment in collocations on the "if you build it, they will come" theory that resulted in so many CLEC bankruptcies during this Commission's tenure over the last four years.[145] Again, many multi-location customers only sign onto the CLEC's service if the CLEC can serve all of the customer's locations, regardless of where the CLEC has, or does not have, its own facilities in place to provide that service.

Given this impairment analysis, ALTS proposes that the Commission adopt rules that limit the use of UNE-P as a provisioning method to a level of capacity above which a competitor could reasonably be expected to deploy facilities in an economically efficient manner, assuming a stable pricing regime that does not differ dramatically from today's TELRIC pricing.[146] ALTS believes that a realistic UNE-P cap equal to 1,344 voice grade equivalent lines (2 DS-3s worth of

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[144] See Pickens Declaration ¶ 2.

[145] See Hanser Declaration ¶ 4.

[146] Any analysis of where to deploy facilities is very sensitive to ongoing variable costs such as the pricing or underlying loop facilities. See Jenn Declaration ¶ 9. Without stable pricing structures the proposals included herein with a hard line cap would not be appropriate.

DS-0 lines) is warranted based on inherent ILEC cost advantages, standards of facilities deployment for an efficient CLEC, as discussed herein, and the supporting declarations of member companies.[147] Once a CLEC has met the 1,344 line level in a wire center, no additional lines would qualify for UNE-P pricing. Moreover, the CLEC's entire embedded base of lines in that wire center would require migration to UNE-L in accordance with the transition schedule discussed below. This way, the Commission can ensure that a full migration to UNE-L takes place at the exact moment it becomes economically viable to so require.

B. Transition to UNE-L

From a public policy perspective, the impairment approach detailed above strikes the right balance between promoting facilities-based business models and encouraging market entry on a sustainable economic basis. Rather than creating long term reliance on off-net services, the approach is carefully calibrated to maximize the speed by which facilities-based competition materializes in any given central office. This approach also enables CLECs to continue to expand into, and invest in, the greatest possible number of geographic markets by allowing them to achieve scale and operating efficiencies before requiring them to incur high capital costs and operating cost burdens that otherwise would prohibit market entry.

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[147] *See* Jenn Declaration ¶ 9 (estimating a breakeven point in the range of 1500-3000 lines per wire center). The proposed threshold of 1344 lines at which point a CLEC is no longer impaired without access to UNE-P derives from a CLEC's impairment where the ILEC's cost position is fundamentally lower than the CLECs cost position due to the ILEC's infrastructure advantage as an incumbent monopolist. By definition, the ILEC's cost (including the loop and switching) to service a DS0 line is the TELRIC cost for providing that service, e.g., the current TELRIC price for UNE-P. Thus, we argue that a CLEC is no longer impaired when it can service a DS0 loop based on UNE-L at costs no higher than would be incurred by using UNE-P. Obviously, this cost analysis will vary across companies, states, and wire centers. However, we believe that a single threshold is the only administratively viable approach. *See* Gawlick Declaration ¶¶ 13-15.

As discussed above, once a CLEC has achieved a reasonable penetration level in a given central office, as indicated by an access line count of 1,344 lines, that CLEC would automatically cease to be eligible for UNE-P pricing on additional line growth in that central office and would be required to establish collocation there, space permitting, or make alternative arrangements to transition its embedded base of lines from UNE-P to UNE-L, or some other equivalent service at TELRIC rates. As the Commission correctly noted in the *Triennial Review Order*, "[t]he most critical aspect of any industry-wide transition plan is to avoid significant disruption to the existing customer base served via unbundled local circuit switching so that customers will continue to have access to their telecommunications service." *Triennial Review Order* ¶ 529.

To that end, ALTS proposes a transition period for a CLEC's embedded base of UNE-P lines in a given central office that is roughly consistent with the transition framework the Commission adopted in the *Triennial Review Order* for mass market customers: beginning at the point the CLEC exceeds the 1,344 line count threshold, the CLEC would have 27 months to complete the conversion of its UNE-P customers to UNE-L. Given all of the infrastructure deployment necessary to enable the transition from UNE-P to UNE-L, and the need for precise coordination of hot cuts with the ILEC to enable the transition to be completed without service disruption to the CLEC's end users, we believe that a transition period of 27 months is rational, and does not unreasonably delay the transition from UNE-P to facilities-based services.

Finally, a low-cost hot cut process for moving end users off of UNE-P and onto a CLEC's facilities is a critical component in making the entire process a successful economic proposition. As the Commission noted in its *Triennial Review Order* decision, the difficulties associated with existing hot cut processes have long been an impediment to the provision of

facilities-based services to end user customers.[148] *See id.* ¶ 487; n 1516. If a transition off of UNE-P is to be successfully effectuated, an economically and operationally viable hot cut process must be part of the plan.

IX. THE COMMISSION MUST ENSURE THAT OPERATIONS SUPPORT SYSTEMS IS A NETWORK ELEMENT IN ALL MARKETS.

There should no controversy with regard to the continued availability of operations support systems ("OSS") as a network element. As the Commission found in the *Triennial Review Order*, "the systems, databases, and personnel that the incumbent LEC uses to provide OSS functions represent an extensive infrastructure that would be difficult, if not impossible, for competitors to duplicate." *Triennial Review Order* ¶ 564. Because these systems, databases and personnel are under the incumbents' "exclusive control" and are necessary to enable competitors to obtain access to network elements, resell incumbent LEC service and interconnect, competition would come to a halt if OSS were eliminated from the list of unbundled network elements. *See id.* Not even the incumbents dispute this point and they did not bring the issue of OSS availability before the D.C. Circuit in *USTA II*. The Commission must therefore continue to require that competitors provide unbundled access to OSS.

X. CONCLUSION

The Commission should adopt unbundling rules in accordance with the discussion herein.

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[148] ALTS also recommends that the nonrecurring charge for such hot cuts be limited to $5.00/line, including the ordering and physical migration for each line. This charge is similar to the charge the ILECs are permitted for inter-exchange carrier changes.

Respectfully submitted,

/s/

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